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SLEEP AND
SLEEPLESSNESS

SLEEP AND SLEEPLESSNESS

BY

HAYDN BROWN

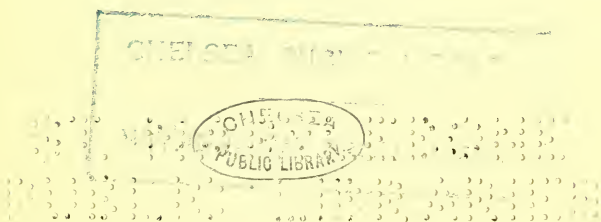
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PREFACE

OF all disorders and distresses I do not know of one which has had less justice done to it by either the scientific researcher, the philosophic reasoner, or the psychic practitioner, than insomnia ; a very few articles have been written, but even by the pens of great physicians tentatively, somewhat apologetically, and in places timorously. The very latest reference I can find to the subject, contained in a review of a book on health written by a scientist of standing and authority in the *Lancet*, August 21st, 1909, is eloquent of the preferring-another-subject attitude of the most advanced of therapeutists ; and he would fain break into musical mood in order to gently appease the captious and exacting enquirer as he goes along. The *Lancet* review says in reference to the book :—"The Author's views on sleep, about which he writes at some length, are well expressed in the lines which he quotes :

" 'Blest be the man who first invented sleep,
But curst be he with curses loud and deep
Who first invented and went round advising
An artificial, cut-off, early rising.' "

" *The advice in regard to sleep is, in brief, to take as much as possible.*" There the restless reader is left, and God may help him.

The following pages constitute an effort to deal seriously with one of the most prevalent and distressing disorders with which humanity seems doomed to be overwhelmed—albeit in days of increasing mental

and nervous stress with greater need for sleep than ever. I trust, however, that this little volume may not only so far serve a modest, earnest, and useful purpose, but that it may pave the way to more study, even profounder investigation, and still further knowledge. For we are of little use without sleep: a civilisation that can navigate air and send wireless messages incredible distances, however enlightened it may be, will not devise various means of excessive living and working successfully unless it include in its scheme so many hours of complete rest to mind and body; advancement of thought and its corresponding enhancement of energy both indeed demand as near perfection of adjustment in recuperating alternative as is possible.

Insomnia is now causing an appalling number of suicides and deaths through over-drugging; making the remainder of life a hell of agony for many thousands who are searching around in vain for help and finding none—excepting more of the drug—only to be pursued by more misery. Therefore I have not only set out to impart some simple information upon an important subject to those who are disposed to enquire and think a little for themselves, for if I succeed in further pointing out the unwisdom and short-sightedness of taking dangerous narcotics in order to procure sleep, and if I save ever so few despairing sufferers from a hopeless enslavement, enthrallment, and abandonment—which may well be described as a living death—I feel I shall not have worked in vain.

HAYDN BROWN

THE BISHAMS,
CATERHAM VALLEY,
SURREY.

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SLEEP AND SLEEPLESSNESS

CHAPTER I

WHAT IS SLEEP?

THE condition of sleep has been described by many authorities in various terms, and as having somewhat mystifying significances, limitations, irregularities, and departures. Some scientists have described it as a normal restful condition, while others equally trustworthy have declared it to be a mild toxic state due to previous mental and physical exertion—variations and complications in sleep depending upon so many degrees or kinds of blood contamination or poisoning. Most people understand it to be simply a period of rest to body and mind which should contrast with activity, so that a person may go on living upon comfortable and useful alternations, reposing and restoring, as night does day, or as lesser light relieves sunshine. Engineers aver that it is necessary even for machinery to sleep: that if an engine be worked continuously it will



not last a life of so many working hours as it would if allowed to cease running and to rest now and then.

Nor is it necessary for a human being to sleep regularly at night. This time has been chosen because more convenient. Night workers can sleep very well in the day-time, often better than "day-dreamers" can sleep at night. Many animals sleep habitually in the day-time and feed at night.

Muscles and nerves of great activity during the day require rest in order to recuperate for other spells; but there are apparent exceptions, for the heart and internal organs go on working during sleep, which serve to defy the scientist to argue finally and quite satisfactorily just why they ought. Why should not the great Creator have given periodic rest all round? We cannot answer. It is just about as useless for us to try and puzzle out the whys and wherefores of bodily functions as it is to attempt to explain the arrangements and movements of the stars: astronomers may discern just so much as very big powerful microscopes enable them, but they learn comparatively very little in any case; so also do physiologists and pathologists fall absurdly short of finality in their researchings and strainings and speculations regarding living protoplasmic, cellular, or any other processes.

It is therefore natural and necessary to allow sleep to alternate with activity of mind and body. Physiological function of involuntary muscle, nerve, or brain may appear ceaseless, being normally automatic under instinctive direction,

but it always requires some amount of break: even the slow vermicular movement of involuntary intestinal muscle is subject to periodic relaxation. There is this clear distinction, then, that while such activities as maintain simple life, some of which are more or less involuntary, automatic, or instinctive, require no periodic prolonged cessation in order to recuperate, those concerned with stern competition or pleasurable acquisition, such as is involved in obtaining food or in engaging in agreeable sport or occupation, must alternate with natural desire and requirement of rest, amounts and times and regularities varying according to such dispositions and temperaments as serve to influence the individual. An animal must energise to get food, as a competitive human must move in order to get beyond another. Even a caged animal will endeavour to escape, and a sedentary clerk will delight in walking or in playing some game. But muscular energy is not so necessary as an alternative to rest as rest is to energy: a person may live a life-time bed-ridden; a patient has been known to remain in bed at a hospital for incurables for over fifty years.

Sleep is a suspension of activity of the nervous system. It is just as ordinary and ordained as rain and shine, leaf and fall of leaf—and just as inexplicable, excepting that as a contrast to activity it is similar to most contrasts in creation, insomuch as it is vouchsafed to us for an unseen ruler's purpose. All motives in creation are expressed in contrasts which are usually both interesting and beautiful.

From physiological experiments of scientists,

such as those made by Durham in 1860, Weir Mitchell in 1877, and Mosso in 1881, it has been agreed that during sleep the brain becomes anæmic, the blood of the whole body undergoing redistribution for the time being. It may be easily understood that during bodily activity the heart will beat rather more frequently and more blood will be sent to the head. Mental activity of itself also causes greater supply of blood to be sent, or drawn, towards the head, according as the nervous system dictates. Oxidation and tissue changes are diminished during sleep, suggesting that accumulation of toxic by-products during activity may assist in precipitating sleep.

Opinions regarding the nature and causation of sleep, expressed by eminent observers, differ considerably. Sir William Broadbent described sleep as consisting "essentially of suspension of the functions of the higher centres of sensation, or rather perception, involving inaction of the corresponding motor centre." But he went no further. While favouring a theory involving the circulation of blood through the brain, we should do well to take careful note of the fact that Doctors Leonard Hill and Morrison have diametrically differed as regards the vaso-motor regulation of blood-supply of the brain, the one arguing that no nerves are distributed to the cerebral blood-vessels, the other actually showing specimens of nerves dissected out. The former observer has made considerable experimentation and found, as set forth so clearly in Allbutt's *System of Medicine*, that "During sleep impulses cease to excite, and the brain is

refreshed by rest ; at the same time, the sphygmometer shows that the arterial pressure is lowered, the cerebral veins are congested by the horizontal posture, respiration is far less deep, and the plethysmograph records that the blood is driven in increased volume to the limbs. Thus the brain tissue recovers from fatigue in spite of a diminished cerebral circulation. The expansion of the vessels of the limbs is due probably to two causes : (1) warmth ; (2) diminished respiration and absence of muscular movement. Owing to the former the vessels dilate ; owing to the latter the blood congests in the veins. As we awaken the blood forsakes the periphery ; by the increased action of the heart, the greater tone of the arterial system, and the important aid which respiration and muscular movements render to the venous circulation, it is driven in a greater volume through the brain. We cannot say that either the waking or the sleeping state is produced by these circulatory changes. I have observed a patient to fall asleep while the arterial pressure remained constant ; the fall indicated by the sphygmometer may be as great during a period of rest as during sleep. In sleep, as in chloroform anæsthesia, the brain is congested with venous blood at the expense of arterial blood. It is, however, more probable that this is the result rather than the cause of the functional inactivity of the nervous system. Soon after a short period of hard muscular exercise the sphygmometer shows a fall of arterial pressure. This fall follows the rise of pressure which is found during the period of exercise, and

is due probably to the vascular dilatation of the skin and muscles. In spite of this fall of pressure the brain is then often most fitted for mental labour."

My own personal opinion leans towards the toxæmia or blood-poison causation, and the observations quoted from Dr. Leonard Hill to my mind tend to confirm this, in his finding that "the brain is congested with venous blood at the expense of arterial blood." The simple anæmia-of-the-brain theory is far too shallow, speculative, and incoherent, for various forms of anæmia are known to be the cause of inability to sleep in many instances.

The great Humboldt was of opinion that sleep resulted from a lessening of oxygen in the brain, which was restored during rest, when the remainder of the body was consuming less of this element. This appears to me to be only another way of expressing the fact that the accumulation of poisonous products—of fatigue or of digestion—entails *pari passu* a diminution of healthy oxygenated blood.

Dr. Walters of Mossley found that in a case of very severe constipation the patient slept "any time of the day." I give his own words as delivered before the Society of Suggestive Therapeutics: "For instance, if she took one of her children on her lap she would fall into a sleep which would last two or three hours. After treatment this somnolency left her entirely, and she felt herself quite bright and cheerful."¹ In this case the severe constipation from which he found

¹ Reported in *The General Practitioner*, August 14th, 1909.

she suffered evidently contributed towards a toxæmia which produced a tendency to sleep. *The reader must, however, be extremely careful in his study of the whole question, for it will be found in the later pages of this booklet, as a fundamental theory, that excessive toxæmia is one of the most decisive causes of insomnia*, if it proceed to producing pain or distress from chronic disorder of stomach, liver, intestines, and blood circulation. It follows that constipation—over a period of some months—may produce a tendency to oversleepiness on account of a certain degree and kind of toxæmia, while after a long period, in which the blood has at the same time become loaded with various other impurities, the diametrically opposite is arrived at.

When the investigator Bradbury contributed his “most probable” hypothesis explaining the physiology of sleep as “an altered metabolism of the cerebral cells dependent upon exhaustion and diminished influx of stimuli,” he merely unwittingly expressed the toxæmia theory, for diminished influx of stimuli must involve an increased influx of impurities in the blood, which are depressing, creating inactivity of primarily the brain and secondarily the body, and inducing sleep.

THE DIFFERENT KINDS AND DEGREES OF SLEEP

I will ask the reader to consider with me the following kinds and degrees of sleep:—

(a) *The simple normal sleep* of the healthy, which results from such functional activity as is necessary for maintaining life, or which may be

further induced by either moderate exercise or by a meal: in the case of functional performance or additional exercise, either the toxic by-products of oxidation or combustion provoke sleep, or the mere exhaustion of the nervous system which regulates the blood supply to the brain allows an anæmic state to enter. In the case of a meal being taken, digestion either involves increased blood supply to the internal organs with corresponding diminution in the brain, or contributes a certain amount of toxic material to the blood.

(b) *The sound or deep sleep*, in which the person is more difficult to awake, doubtless according to the degree of toxicity or the extent to which anæmia of the brain is present, the amount of muscular or food-assimilating activity having been extra.

(c) *The dreaming sleep*, in which the sleep is light, the activity of the mind being only partially inhibited, ideas being aroused without much rational purpose, and having disorderly arrangement, mental pictures often having unusual vividness and intensity.

(d) *The somnambulic sleep*, in which the person can walk and speak, having passed into quite another frame of mind, so to speak, not remembering anything that transpired during the sleep on awakening.

(e) *The comatose sleep* of sickness, or that is the result of injury to the brain, in which absolutely all consciousness is lost, the person not being influenced by either noise or painful stimulation.

(f) *The hysterical sleep*, a diseased form of auto-

hypnotic sleep, in which the patient is to a great extent conscious, but the will-power is defective, distinguishing it from the simple hypnotically suggested rest in which the will-power is quite alive and capable, notwithstanding.

(g) *The drug sleep*, which differs from an ordinary sleep by being caused by certain poisons administered.

(h) Lastly there is the *hypnotic sleep*, in which certain powers of thought, will, and action are retained, the person being quite conscious, save to some extent in the somnambulic stage, but at the same time deriving the profoundest and most comfortable rest both mentally and physically.

THE SIMPLE NORMAL SLEEP

In certain diseases the profoundest sleep of coma sometimes occurs, which is evidently produced by the toxic condition of the blood; in malarial fever, diabetes, chronic inflammation of the kidney, for instance, the system is saturated with various poisonous products, and a common termination of such is coma. This fact of itself suggests the milder toxic nature of normal sleep, the toxins being produced by the ordinary activities incidental to normal or extra-energetic life. Normal sleep may be toxæmially described as of two degrees: the one caused by functional toxins, the other by functional plus muscular-energetic toxins.

Epileptics sometimes habitually sleep to an inordinate extent, suggesting that toxins which cause the periodic epileptic brain-storms also reactionally induce prolonged extra deep sleep;

but inasmuch as long epileptic sleeps (not the comatose states immediately following a fit) are almost indistinguishable from simple normal sleeps, we have here again the suggestion that the latter are also caused by some degree of toxicity acting upon the brain, heart, and blood-vessels.

Fatigue is caused by toxins in the blood, as Haig has so clearly pointed out in his wonderful work¹; now, a fair amount of fatigue will induce sleep, while over-fatigue will prevent sleep.

Nothing will serve to corroborate my contention, and to convince the enquirer that normal sleep is really caused by a normally-generated degree of toxæmia, producing an equivalent to anæmia of the brain, better than the disease sleeping-sickness, which is caused by a parasite being introduced into the blood by a variety of tsetse fly, *Glossina palpalis*. In this disease the patient, over a period of six to eighteen months, develops the tendency to sleep more and more, until he will not feed unless aroused to do so, and ultimately dies. But in this case the cerebro-spinal fluid is the chief seat of the development of the parasite, hence instead of the over-toxæmia creating distress of muscular, circulatory, and alimentary systems, as I contend it does in ordinary cases of sleeplessness, in sleeping-sickness it contributes only to the extent of persistently causing sleep.

Normal sleep may be prevented, as we shall see, by sensation, perception, will-power, or emotion, especially as these create an increase in the action of the heart and tend to prevent quietude of the brain.

¹ *Uric Acid in Causation of Disease*, by Alexander Haig.

Simple normal sleep is also greatly influenced by auto-suggestion. Time for sleep, indicated by darkness, will help to induce the state. The heart-beats become slower during sleep, as also respiration; some authorities consider such diminutions to be brought about by sleep, but it must not be forgotten that they nearly always precede sleep, and in fact help to induce sleep, being the very opposite to such activities mentally and physically as prevent sleep. There are exceptions, of course, in which increased heart-beat and respiration are overcome by toxic influence.

The perfect sleep is one which affords absolute rest, mentally and physically, no dreaming taking place, consciousness being entirely lost, while the sleeper may be aroused by noises that are loud enough or unusual, contentment and refreshing satisfaction being perceived on awaking. The perfect sleep should be followed by a strong desire to rise and display activity, if the system is not loaded with toxins that are over and above what were required for simple sleep. It follows that perfect sleep is bound to be followed by perfect sense of health on waking, for superabundance of toxins on waking, with headache and heavy feeling, could only follow abnormal sleep with restlessness and probably dreaming.

A child's sleep, or an animal's—when both are in health—is about the best example of perfect sleep—in this respect, that disturbing adult thoughts or emotions are not present. In the human adult disturbing influences will beget further disturbing dream thoughts.

Quadrupeds have occasionally appeared to sleep standing. Horses commonly seem to do so, although there can be no doubt that the sleep is not so profound or restful as when lying down. Birds sleep standing, sometimes on one leg only, as though they should rest as much of the whole body and limbs as possible. Those sleeping on the ground usually stand up with extended leg, evidently in order that their body shall be clear of smaller creatures, insects, etc., and in such cases the legs are long, such as those of the heron falling asleep near a stream when tired of fishing. Short-legged birds usually sleep on branches with legs bent and body resting upon the feet.

Soldiers have sometimes declared they have slept when standing, in boasting of their extraordinary tiredness and sustained efforts to keep awake in remaining standing on duty; but there is no authentic proof that any human being can sleep standing, for the effort to maintain equilibrium would certainly awake a person, and no person asleep can be put on his legs and left there erect. An officer on active service once informed me that he had slept while standing, and the earnestness of his report was almost convincing, until he explained that he had "dropped off" while leaning with his abdomen and hands upon the handle of his sword which was pointing downwards on the ground, thus constituting a tripod. Even then I doubted whether he had really slept. He may have reached a profound sensation and conviction that he had slept without having really done so.

THE DEEP NORMAL SLEEP

There are both superficial-normal and deep-normal sleeps, according as minimum or maximum call has been made upon functions and activities. The sparsely-feeding bed-ridden person will sometimes provide us with an example of the lightest normal sleep, while the hard-working, healthy navy will commonly enter into the heaviest normal sleep, neither of these examples displaying any error of digestion, and both weak and strong resting under normally comfortable conditions, while dreaming not at all, the one subject to an infinitesimal quantity of toxins, and the other having an amount of fatigue toxins adding their influence. The former will eat very little and generate but a limited quantity of toxins from this cause, while the latter will feed upon a comparatively large quantity, the toxins of fatigue, generating sleep, not being overbalanced, however, by those producing restlessness.

The first part of a normal length of sleep is usually the profoundest, and four to six hours may be enjoyed of the deepest, to be disturbed afterwards by here and there a movement or a transitory awakening—or perchance a trivial dream. Some deep and perfect sleepers, however, sleep soundly until awoke for getting up. The depths of sleeps have been gauged by an experimenter named Kohlschütter, who employed various sounds to awaken his subjects. It will be well understood that the deeper a normal sleep is during the first stages the longer is the sleep likely to last.

DREAMS AND NIGHTMARES

The form of sleep complicated by dreams and nightmares is usually light. Deeper sleep is prevented, and the mind is busy with events which have recently taken place. Thus only a portion of the brain-power is inhibited under light sleep, the busy portions being those which have been specially occupied previously. Dreams usually accompany indigestion, and if the indigestion should have followed some excitement or other the dreams will probably have reference to this excitement. It is the discomfort of the indigestion that causes the sleep to be light. Experiment has shown most dreams to be of extremely short duration—some of the instantaneous ones involving quite a long series of events. And recent events sometimes bring forward quite old ones. Sensory impressions upon the sleeper will also sometimes cause dreams ; noises, for instance, will cause dreams of alarming occurrences. The memory for past events is sometimes more vivid in dreams than in the waking state. Occasionally dreams will be accompanied by movements which suggest the somnambulic form of sleep to the observer.

Unpleasant dreams and nightmares are sometimes the indication of a slow development of insanity or a disposition to apoplexy. When occurring in younger people they are usually associated with errors of digestion, as we have seen ; but when complained of in later life, after some years of good health and sound sleep, they should receive all the more careful consideration as possibly indicating a more serious condition.

The rapidity of dreams seems to have been well and finally demonstrated by Lord Holland, who fell asleep as he was listening to a story being read. During this sleep he had a long dream, but woke again to hear the sentence completed of which he had just previously heard the beginning. This probably affords a correct example; but one must not forget that the book may have been read by him on a previous occasion, and that sleep and dreaming had merely brought out vivid recollection.

Some authorities aver that all people dream just before waking: others have found that this is not at all necessary, though quite common. It does not seem altogether clear how much dreaming is due to mental excitability or derangement of digestion in some cases, for as the former so frequently causes the latter, who shall discriminate? I am myself of opinion that discomforts of all kinds cause either dreaming or nightmare, and as indigestion is one of the commonest discomforts, it must have the credit for creating most dreams. I consider that perfectly unconscious sleep would possess all those who are sound and healthy, while undergoing normal habit and usage, at such times as sufficient fatigue, whether mental, physical, or functional, determined. Some authorities are of opinion that dreaming is the rule, others the exception—amongst the latter are Sir H. Holland and Sir Benjamin Brodie.

Dr. Beattie made the discovery that one could excite dreams by whispering in the ear of a sleeping person. Another observer found that by exposing a portion of his limbs he induced a

dream that he was taking a cold drive. Maury, a painstaking investigator, found that when the lips were tickled dreams of agony were produced, and so on. But inasmuch as such an influence should just as well excite a pleasurable dream or sensation, I must contend that some other disturbance was also operating the while, the latter being predisposing, while the tickling was merely exciting.

Disturbances of muscle, caused by over-action during the day-time, while engaging in very energetic or prolonged athletic exercise, such as skating or football or rowing to excess, or by strains that occur in an exciting struggle or effort, produce dreams, which usually include a repetition to some extent of the kind of day-time activity that has occurred, though the dream may vary in detail and association considerably.

One dream may excite others and cause a brain to be quite busy with sequences of events, the primary bodily excitability or disturbance usually continuing more or less. It is also a familiar fact that the sleeping state does very frequently render scenes and imaginations vastly more vivid, although disorder and incoherency are, of course, the rule with the latter.

I look upon the disorder and incoherency as due to the fitfulness of dream visions, now appearing, now dying away, again springing forth, just according as disturbances to the body are interrupted or perceived with variable intensity from moment to moment. Colicky pains, for instance, being usually momentary and oft-recurring, will excite stirring dreams or nightmares that are as

disorderly in time and as disconnected as it is possible to conceive.

Dreams will undoubtedly contribute to sleeplessness. It is only too well known how often people awake in the midst or at the end of a dream. There are dreams which will awake a person and yet the memory of them will not be carried into the waking mind. Some kinds of nightmare will also awake a person, who cannot state exactly what it was that awoke him.

Disturbances may be of a more or less pleasant nature and consequently lead to pleasant dreams. A gentle, undulating, flying sensation is very common as a pleasant dream; but by what disturbance occasioned it is not easy to determine. On the other hand, nightmares involving struggling and endeavour to escape are usually caused by painful disturbances referable to the alimentary tract, which have excited ideas suggested by some thrilling incident that has occurred the day previously, the whole occasion having caused disturbance to the digestion.

SOMNAMBULIC SLEEP

The effect of a dream may be so powerful in a neurotic subject as to cause him to make journeys during the night, getting out of bed and even undergoing hazardous adventures, ultimately returning to bed and sleeping again, forgetting absolutely all that took place when awaking in the morning. A somnambulist may merely take a journey and return, or may call upon persons and speak to them. Sometimes hysterical interviews are observed, occasionally great distress or fright

being manifested. Night-terrors come under the latter category. I am of opinion that error of digestion is the provoking factor in somnambulism and night-terrors, as also usually a toxic condition of the blood producing a hyper-stimulated condition of the nervous system.

There is nearly always a family history of various nervous disorders to be elicited from somnambules. In somnambulism a dream will be so vivid that it arouses brain centres for voluntary movement to action. The condition requires rigorous general treatment or some disaster may be incurred in a specially marked instance. A person may possibly walk into a river or climb on to the roof of a house in his exciting dream; although most somnambules display remarkable agility and abnormal powers of avoiding disaster, as a rule. Habitual busy talking in sleep is usually a forerunner of somnambulism, and young people who are frequently given to this abnormality had better be treated for their neurotic condition; their cure should not be a difficult matter under wise dietary and temporary medicinal aid.

COMATOSE SLEEP

This is often a sleep of disease, in which the patient either cannot be aroused at all by any form of stimulation, or only with great difficulty, according to the depth of the coma. It may be associated with apoplexy, disease of the kidneys, or diabetes; but it may also result from direct injury to the brain. Certain well-known poisons likewise produce a comatose condition, such as opium, while alcohol taken in large quantity will itself

produce a condition that may be difficult to distinguish from other kinds of coma. In all comatose conditions not created by direct injury to the brain the cause is therefore really a poison of one kind or another; thus it may be either a poison generated by disease, or one constituted of an injuriously large quantity of some stimulant or narcotic, or again it may be one of the scheduled poisons of a corrosive or paralysing nature.

It is extremely necessary for certain people to be able to recognise particular kinds of comatose sleep. Policemen, for instance, or those in attendance in crowded public places, not uncommonly make disastrous mistakes, perhaps conveying a person who has fallen comatose from apoplexy to the police station as one who is profoundly inebriated, giving them a can of water and an uncomfortable cell alone for the night instead of a home or hospital bed under the most skilful attendance. Comatose conditions are all very much alike to the untrained eye, and when a person has previously taken alcoholic stimulant on account of feeling unwell, the suggestion that the coma is one of drunkenness may be all the greater. Many an apoplectic patient has died in a police cell during the night who might have lived under appropriately careful and scientifically-directed conditions. Coma from head injury is also sometimes mistaken for drunkenness, and even appearance of blood and observance of actual injury will not always serve to lead the judgment on the right track, for a drunken man may fall and injure his head, and even a trained ambulance man may suppose that drunkenness had been the sole cause of

the coma, treating the patient accordingly. The reader will, moreover, understand that a person may get a double coma from drink and from head injury. And when it is pointed out that some head injuries are extremely difficult to find, particularly those of the base of the brain, it will be appreciated how possible it may be for a grievous error in diagnosis and an undeserved stigma to be cast upon the perfectly innocent.

A person may have taken no narcotic, but may have been seized with apoplexy, falling upon the head and creating an additional degree of coma, and may then be taken to the police station for being drunk. Only a medical man is capable of discriminating the various forms of profound comatose sleep by such infinitesimal signs or slight symptoms as are peculiar to one or the other.

THE HYSTERICAL SLEEP

This form is very much like the hypnotic sleep, and there cannot be a doubt but what the cause is also of a toxic order, although the nature of the poison circulating is not so virulent and lethal as in the case of comatose sleep. Hysteria takes place in those who are nervous by inheritance, or who have acquired disease or disorder, or, again, who are hyper-stimulated by diet; and it is largely, if not entirely, curable by carefully adjusted, easily digested, non-stimulating diet. Excitement, grief, loss of friends, or quarrels are in turn blamed as causations, but the fact remains that similar conditions affecting others will not be followed by similar effects. A sensitive nervous system is rightly put down as a predisposing

cause ; but it must be remembèred that such a system is frequently produced by too stimulating dietaries. No two people are exactly alike. One may suffer nothing from a diet that will produce marked disorders of various kinds in another. Sometimes an hysterical sleep is described as a trance or swoon, and it may last for days or even weeks.

THE DRUG SLEEP

We have seen how the naturally soporific effect of either normally-acting and physiologically-functioning digestion, or of muscular energy, respectively, may be deepened and intensified by the further addition of toxins from improper food or excessive exercise, converting the light, recuperative, and refreshing sleep into the heavier slumber after which a headache or other distress may make a person feel "all the worse for it." Similarly, the poisonous effects of drugs will create sleep where none would take place otherwise, or render a light, short sleep into a long, deep one. Here, again, the effects are disadvantageous as well as advantageous ; for all artificially produced sleep begets both in about equal quantities. It is true that there are certain painful conditions which prevent sleeping that are best met by some narcotic administered. One is obliged to make a choice of evils under these circumstances : one must meet abnormality by unusual or even drastic means at times, hoping that the condition necessitating the particular remedy may only be temporary. It is only necessary under this heading to describe the drug sleep ; further reference to



the effects and actions of the various kinds of drugs will be made in a later chapter.

Motor and cerebral depressant drugs produce sleep by paralysing the motor convolutions of the brain and by diminishing reflex effect. Alcohol, chloroform, and ether in sufficient dose stop all voluntary movements, as do also opium, chloral, aconite, hemlock ; and if the dose be large enough death will take place, comatose sleep having ultimately been produced in some instances.

THE HYPNOTIC "SLEEP"

This form of sleep is so different from any of the others that it is really misnamed. Strictly speaking, it is not a sleep as is usually understood ; it only appears to be so ; it is better described as a semi-sleep, or nerve-rest, or partial-brain-rest, for there is always an element of consciousness existing in all persons hypnotised, unless the somnambulic stage is reached, or unless it is intended that there shall be loss of memory after hypnosis for any particular reason : but most authorities opine that there is never absolute amnesia or loss of memory even in the case of somnambulism. Some subjects feel as though they were asleep, and when awake again feel as though they had been asleep, and in answer to enquiry both under hypnotism and when awake they declare they have been asleep. Others declare they have not felt as though they were asleep ; they have perceived themselves to be in a "conscious sleep," because they have known everything that has been going on and heard what was spoken to them ; at another time and in another

sense the same subjects have believed themselves in most part to have been asleep on account of certain demonstrated disabilities. Again, the hypnotised subject *appears* to others to be asleep, and usually profoundly so, more so than in an ordinary sleep—more fixedly so. The length of time he will remain in this condition also helps the appearance to others of ordinary sleep. He also knows he has appeared to be asleep to others, and will thus admit it the more readily. To the experienced observer, however, there is a great difference in the appearance between the ordinary and the hypnotic state. The countenance in the latter is very characteristic, and on each occasion practically the same, while the countenance of one in natural ordinary sleep varies considerably. The appearance of the face of an ordinary sleeper needs no description: in the hypnotic state the face appears more fixed in rest, as though the whole head and body were comfortably rigid, having no desire to move, quite content and happy to remain just the same all the time, while the position of the limbs remains unusually rigid and unalterable; and this is practically what the subject himself actually feels.

Authorities differ considerably in their theories regarding the nature of the hypnotic state, and Moll is perfectly honest and frank when he writes, "I do not think that any of the physiological theories hitherto propounded can be considered in the least degree satisfactory . . . the connection between mind and body is still purely hypothetical . . . we may, surely, be allowed to hope that in future less will be asserted and more will be proved."

The best works written on the subject of Hypnotism are Braid's *Neurypnology* (George Redway); Lloyd Tuckey's *Hypnotism* (Bailliere's); Milne Bramwell's *Hypnotism, its History, Practice, and Theory* (Grant Richards); Albert Moll's *Hypnotism* (Scott Pub. Co.). The student will find in these exhaustive works full reference to all theories, and he will be a clever deducer who can extract from them a clear, tenable, and final explanation of the state.

Nor do I myself set out to clearly and completely explain the nature of the hypnotic state in the face of the splendid efforts and researches which the above authorities have made and have confessedly failed in. It must be left for readers to puzzle out a difficult subject and endeavour to understand the various explanations of phenomena. All I intend in an unpretentious study is to offer simple facts and elucidations derived from my own investigations and experiments, in order to test the various affirmations and conclusions of others, drawing data from my own experience in medical practice and in the treatment of various diseases and disorders of the nervous system in particular, trusting such will help the reader to understand at least something of the nature of the hypnotic state.

I feel bound to include the hypnotic "sleep" amongst the various kinds, because it is important in this respect, that for some purposes it is as good as ordinary sleep, while in a considerable number of cases it is decidedly better; for special purposes it is infinitely better, while it may be a very valuable means of obtaining natural normal sleep

under conditions which either entirely prevent the latter or make it seriously defective in character. This form of rest is so little understood by the average reader—indeed, even by many medical men—that I offer the following points for careful consideration, and I shall endeavour to make them as short and clear as possible :—

(a) Though the state of hypnosis appears like sleep, and though some early authorities have considered it to be really a deep sleep, yet it is not a sleep as we understand ordinary sleep. Ordinary sleep involves unconsciousness, while in the hypnotic state there is practically always *some degree* of consciousness.

(b) The consciousness of the hypnotic state may even be more alert and capable when *en rapport* with a person acting as controller or operator than it is in the ordinary wakeful state. Attention is usually far more alert, thought more rapid, action more prompt. It is on this account that hypnotism is found to be so valuable as a means of treating disorder and disease, inasmuch as under the guidance and instruction of one skilled in its application for legitimate curative purposes the better senses of the patient can be awakened and strengthened.

(c) The hypnotic state affords a brain and nerve rest which in some respects is far more beneficial than an ordinary sleep.

(d) The hypnotic state can be induced when the ordinary sleep cannot, and, affording profound rest as it does, it may consequently be of considerable value in suitable cases.

(e) The hypnotised person, not being uncon-

scious, has not the will-power weakened as is commonly supposed; on the contrary, the will-power will be strengthened by suitable guidance. It is extremely important that this should be realised. It is true that the operator guides, directs, instructs, persuades, or suggests, but the hypnotised subject wills himself, allows himself, and decides himself. The hypnotic state allows the most powerful influence for good that I know of to take possession of those whose will is weak in certain directions. For instance, a woman develops a bad habit; she has sufficient sense to be hypnotised, but her will-power is weak: influence under hypnotism will strengthen her will and cure her—it may be of drinking to excess, biting the finger nails, kleptomania, or what not.

(*f*) It has been established beyond all dispute—and even the tyro investigating will soon find out the truth of it—that no subject can be hypnotised under ordinary or usual conditions against their exercised will. Whatever is done by the subject is of their own will. It is true that the will-power is increased under hypnosis, therefore a weak will or desire to commit an offence may be converted by an operator into a stronger desire on the part of a person hypnotised. I will, however, defy the reader to give me an authentic instance of hypnotism in proper hands doing a person harm. On the contrary, the number of cases of benefit derived in disorder and disease is increasing immensely, as the treatment is better understood and more frequently adopted.

(*g*) The markedly insane cannot be hypnotised. Certain slightly insane people may be by an

experienced operator. The more healthy and sensible the subject the easier it is to induce hypnosis. It follows from this, and from previous premisses, that in good hands nothing but good can come out of hypnotism, for as it strengthens the will-power, the subject hypnotised really acquires an extra control over himself, being merely guided by the well-intentioned operator.

(h) The hypnotic state permits of extremely interesting phenomena being demonstrated, the subject only responding to the operator's suggestions so long as he knows these are not likely to be harmful. Public exhibition, however, should be disallowed, for two reasons; firstly, it is often degrading and usually serving no useful purpose; secondly, it gives the general public quite a wrong impression as to what the hypnotic state really is, and fills the mind with painful presagings as to what it might be and what might result from it. I should consider that to chloroform a person and to plunge a knife into him, afterwards sewing up the wound, for the purpose of pleasing a curious public, would be an indecent exhibition which would merit the intervention of the police or special prohibitive legislation. Similarly, publicly exhibited catalepsy, enabling needles to be passed into the flesh, and sense-delusions allowing the subject to eat candles for cake, should be absolutely prohibited by law.

The advantages of hypnotism as a treatment for certain nervous affections having been established before unimpeachable medical tribunals, and its being now wholly accepted by the majority of the very highest authorities upon brain and

nerve conditions as not only a legitimate means of cure, but the only means that can benefit in certain difficult nervous disorders, it behoves all right-thinking people to exercise themselves to the end that public exhibition for amusement sake shall be stopped, and to see that a power of immense value shall only be employed for entirely legitimate and beneficial purposes. Instances of graceful dancing under the hypnotic state may have been interesting to some observers, including the scientific, but recent exhibitions have satisfied probably the majority of the public that natural dancing is far more to be desired. Hypnotism in public for amusement sake makes a vulgar show at its best, and gives the laity but a disordered and uncomfortable view of human potentialities.

(i) When properly applied I have never seen a patient either express dislike or declare any disadvantage from hypnosis : even when improperly applied, as for amusement purposes before the public, subjects never complain of unjust dealing, and for the very reason above set forth—that they are always to some extent conscious and willing, and quite happy when the show is over.

(k) Those who feel impelled to argue that the will must at times be weakened may be excused when they have seen public exhibitions. I admit that weakness may be cultivated under hypnosis ; but so also may acts be naturally resisted when objectionable. An abstemious man, when hypnotised, may take a glass of wine, being told that it was water ; but when asked to take another he will pleasantly decline, declaring that one is enough for him. This serves to indicate that the phenomena

under hypnosis *are subject to a subject's own limitations.*

Myers, an advanced scientific investigator, gave his opinion that the moral tone of the hypnotised somnambule was the precise opposite to that of the drunken person : alcohol paralysed certain inhibitory centres and made individuals abnormal in inclinations, urging to further excesses in temper and action, while hypnotism paralysed the lower appetite centres and produced the contrary effect. He considered that a full comprehension of what was wanted on the part of the operator existed in the subliminal consciousness of the subject, as well as an accentuated disposition to carry out what was wanted, provided it seemed rational and advisable and beneficial.

(1) It is possible for hypnotism, when improperly applied, to do some amount of harm, should the subject be persuaded, by training through various stages, to do more than in his normal state he would wish. For instance, a man was once hypnotised in public and told to walk into a butcher's shop and take a leg of mutton ; he did so and was detained by the police. The man apparently stealing a leg of mutton merely takes the joint because he is a willing co-operator with the hypnotiser : the subject probably knows the operator is merely experimenting and that no serious result will follow. The owner of the mutton will be compensated, or his property returned with apologies. Any such act may be analysed and it will be found to amount to a very slight degree of misbehaviour. A medical man using the hypnotic influence for legitimate

purposes, however, would no more depart from such than he would give a harmful dose of medicine. His object is to cure, not to injure.

(*m*) If one gauge the amount of good that hypnotism is capable of effecting, when properly used and applied by duly qualified medical men—who have not only that amount of knowledge without which nobody should employ any potent remedy of any kind, namely the ability to distinguish one disease or condition from another, and the capability of discriminating just such conditions as are likely to be benefited by certain treatments, but also having such knowledge of human nature and the influence of mind upon mind, and mind upon the body to which it belongs, armed with that amount of skill and acquaintance with methods as make them proficient—then one can only conclude that there is a plain and clear argument in favour of the more frequent employment of hypnotism for good and the entire suppression of it for evil. While hypnotism is so little understood, and while public exhibition of it is so useless, degrading, and misleading, the general public is likely to remain comparatively sceptical of its value. The legitimate use of hypnotism is only made in private; illegitimate in public; hence general ignorance regarding it.

(*n*) Public exhibitions have cheated the public and given a false impression as to what hypnotism is and does; they have developed misunderstandings and brought a valuable and scientific means of conferring immense benefits into contempt and ridicule. But even more have books and articles

of fiction had a prejudicial effect, and it will require years of re-education to put the misinformed public right. Hypnotism has been represented by the fiction writer as being a mystic influence of uncommon power working for evil, while the simple and absolute fact is that practically never can one find true instances of harm being done or evil influence exercised — and the more hypnotism is scientifically investigated and the more extensively it is legitimately employed the greater is the value revealed.

(o) Hypnotism has been described also by that eminent authority, Myers, as being a “subliminal consciousness,” the ordinary waking state being supraliminal. He reasoned that the subliminal self can dominate the supraliminal self to the extent of controlling its vaso-motor, circulatory, and nervous systems to a great extent. Thus we can understand why the hypnotic state can be the means of strengthening the will-power of the subject.

(p) A glance at cases of cure recorded by means of hypnotism will convince even the uninitiated that in this state immense power for good can be exercised. Cravings for drink and drugs are frequently cured when every other influence has failed. Obsessions which were incurable by all other means employed by consultants of rank, and which were certain to result in hopeless insanity, have been easily and commonly cured by hypnotic suggestion. Thus the nervous are made strong and the feeble healthy by its means. A further reference to instances of cure will be made in a later chapter.

THE COMPOSITE SLEEP

This is a condition which may be created by food, drink, drug, and hypnotic influences all acting together. I have known instances of all these operating together successfully in bad maniacal or delirious cases of insomnia. For example, firstly, it has been supposed that an empty stomach was the provoking factor, therefore food has been given in order to appease a restless and raging spirit, the idea being that the patient would not have suffered so much if a certain amount of food had been taken. Secondly, something alcoholic has been thrown in as a matter of course, under the belief that it must not be cut off altogether; while chloral has been given by the doctor's orders; and finally hypnotic influence has been brought to bear to help in inducing sleep.

Many people habitually sleep under the influence of drink, which has been taken for the purpose. Alcohol may relieve pangs of indigestion or lull the distresses of neuralgic or rheumatic pains, allowing natural sleep to take possession. But in time bad cases are also sure to require drugs; a man will take alcoholic drink in increasing quantity to help him to sleep; later on he will resort to drugs to give him sleep on account of impending delirium tremens caused by too much alcohol. If he also take strong coffee to keep his strength up during the day, he is going from bad to worse. When all things are thus militating and the patient fails to obtain sleep, I recommend the influence of hypnotism—which as a rule, when slowly, gradually, and properly applied,

absolutely conquers the compound condition and triumphs over all other curative influences.

Some restless people are even in the habit of taking different drugs at the same time, hypnotics and stimulants in the same prescriptions, for instance. It is hardly necessary to point out that a sufferer is going from worse to worse-still in taking narcotics, for there is not one which does not bring its disadvantages: there is not one that does not require to be increased as time goes on, provided the same initiating conditions causing the sleeplessness continue, and they are usually sure to continue if not recognised as the chief and original offending evil, and dealt with accordingly.

NOTE (on going to press).—Certain details of recent experiments made by Professor Weally, of Michigan University, published in England January 21st, 1910, and referred to in the *Daily Telegraph*, regarding "The Brain and the mysteries of Sleep," tend to confirm the main contention of this chapter, the proofs of which were corrected about January 10th.

CHAPTER II

THE AMOUNT OF SLEEP REQUIRED

THIS has ever been a vexed and indefinitely answered question. The fact is that no two people are exactly alike either in temperament, health, or disease ; nor are two alike in habits or necessary duties to be performed. Some will be born neurotic, others phlegmatic ; some will be industrious, others indifferent ; some stout, others lean ; some physically powerful, others flabby and weak ; some having disorders or diseases, of various kinds, others without a complaint and without a sign or symptom of disease which can be distinguished. Some will engage in manual labour, others be bound down to sedentary routine ; some working under favourable hygienic conditions, others the reverse ; some young, others old ; some feeding and drinking as vegetarians or abstemious faddists, others disregarding all rules of diet ; some smoking, others declaring tobacco a poison, and so on. Consequently, any attempt to arrive at a final conclusion for all, as has been so frequently made, is foredoomed to failure, and the eternal question, as raised afresh periodically in our daily newspapers, remains unsolved and just as useful to turn on at the silly season as ever it was.

It is the same abroad. *La Revue*, a French journal, published a set of replies its editor received to the question, What is the right amount of sleep for the average individual and for the brain-worker respectively? The replies are of much the same character as distinguished people in Great Britain have made to the same question. Maurice Maeterlinck, the great author and naturalist, answered that he went to bed at ten and rose at seven : unless he slept nine hours he was unable to work next day. Emile Bontroux, philosopher, declared that he required eight hours, while Jules Clarétie wanted seven at least. Cormon, the great painter, stipulated eight or nine.

Most intellectual men appear to agree that about eight hours are necessary, but I am acquainted with several distinguished brain-workers who appear quite happy with six hours, and some even are content with five. Humboldt took usually less than four hours. Many manual workmen of necessity get only four or five and enjoy good health ; bakers, van-drivers, green-grocers, many of them only allow themselves this amount. Allbutt says old people require more sleep than the middle-aged ; but I have observed that the older a man gets the less sleep he appears to require, for the less day-work and fatigue does he get. He may *rest* many hours more—and usually does—but this should be distinguished from actual sleep.

Some could sleep more, but are not able on account of certain duties to perform ; others might have any amount of opportunity for rest, but could not sleep. They are usually but very

weak characters who wish for more than nine hours' sleep—weak either in mind or body—and I would include stout people and those who indulge inordinately in this category. Fat people are usually sleepy.

One of my patients declared that he had not slept longer than a few minutes at a time during day or night for six months, and his wife confirmed this, so far as she could, having always found him awake whenever she awoke. He suffered severely in health in consequence, but throughout was able to work both mentally and physically, often feeling very weak and ill, however. He was a neurotic subject, and got it into his mind that he would never again sleep properly. He had tried every drug and many alcoholic drinks, but nothing helped him, until he was convinced by suggestion that he could sleep, and there was no further trouble. The less he slept the more his nervous system prevented it; once the idea was corrected his general health improved, and he soon smiled at his previous disability.

We can safely come to this conclusion, therefore, that somewhere about eight hours is the time for those between fifteen and fifty years of age, nine or ten for younger, while over fifty people seem well and happy desiring not more than seven, six, and even five.

It appears that those particularly mentally occupied require not so much more sleep as wakeful diversion. The brain-worker should not divert himself by playing games involving much thought, such as chess and cards, requiring considerable

exercise of memory and calculation. Nothing tends to wakefulness more than overwork or worry of the brain. I would counsel those having much sedentary work to break the strain of mental concentration by easy physical diversion, entailing just a little mental consideration, but not exactly mental effort. Many imagine that the brain-worker should of necessity have much longer sleep than the physical labourer ; they both really require much about the same.



CHAPTER III

THE CAUSES OF SLEEPLESSNESS

SIMPLE CONDITIONS

THE immediate cause of insomnia will be already inferred from a study of the nature of sleep. If a person be tired or sufficiently fatigued after a period of either activity or simple wakefulness he will sleep, provided there be no physically irritative, toxic, or psychic influences to prevent him. Sleep involves a cessation of both voluntary motion and intellectual activity; when dreams take place portions only of the brain are active, while the will has ceased to regulate and control; when somnambulism takes place still further portions of the brain are active; movements such as are made in the waking state, which would be under direction and control, are in somnambulism aroused reflexly by activity in those centres involved in a dream.

Anything interfering with this cessation of voluntary motion and intellectual activity will prevent sleep. Fidgets will come into the mind of the reader at once—a disposition to keep the limbs and body moving—caused by toxæmia. Intellectual exercise before retiring to rest may be of such interesting or absorbing nature as to take possession of the brain and induce some repeti-

tion or consequent ideas when the individual wishes to rest. Energetic thought may be stimulated by neurotic impulse and excitable temperament, which themselves may be aroused by stimulating food or drink. Interesting thought begets further thought; on the other hand, monotonous, uninteresting subjects or sounds will diminish the disposition to think and conduce to sleep. Fatigue will slowly diminish the energy necessary for thinking. Therefore the condition of sleep is gradually acquired, as a rule, partly because fatigue exercises its influence gradually. Cessation of thought is prepared for by a gradually diminishing energy to think. Necessity for thinking will keep a person awake: nothing to keep awake for will induce sleep; we have seen that babies sometimes sleep easily and long partly on this account. The degree of wakefulness will entirely depend upon the intensity or complication of the thoughts. It follows that some people are more wide awake than others, because their powers or disposition for thinking are greater. Thinking should therefore be engaged in at the right time, for the more brain-work immediately before bed-time the greater will be the difficulty to commence sleeping.

The causes of sleeplessness may therefore be divided into predisposing and exciting; the predisposing being such influences as prevent physical ease, such as pain, discomfort, noise, palpitation of the heart, extra blood in the brain, while the exciting are influences that so intensely concern or interest the mind as to bring successive ideas. Worry, anxiety, and fear will excite.

Rapidly acquired sleep usually results from a minimum of intellectual activity with a maximum of physical fatigue—but not so much as creates too great an amount of toxæmia. Hence intellectual sedentary individuals will not, as a rule, sleep so soundly as agricultural labourers.

The *conditions under which a person attempts to sleep* are, of course, important. A different bed in another house may cause sleeplessness, but it must be borne in mind that usually causations twice as powerful in these cases are present as well, namely an excitement due either to travelling, seeing fresh sights, interviewing a number of comparative strangers, or to an indigestion due to changes in feeding or drinking—changes in kind, amount, and time of taking. Even the sort of bed will make a difference to some people, who may not be able to sleep in a feather bed, for instance.

Inasmuch as this treatise is concerned chiefly with habitual or chronic sleeplessness, I must make mention of such a hygienic defect as bad ventilation as a constant cause of sleeplessness in some cases; a person may have rigid ideas regarding night air, or be anxious not to spoil the curtains, or may not wish to give a burglar an invitation to come in, and thus make all as air-tight as possible. Again, some housekeepers like a room stuffed full of fabric of all descriptions; from pile carpets and bed hangings that draw around the bed, to two or three pairs of curtains—which will often, as one has observed, only leave some twelve square inches of aperture between the bedroom and all there is outside the curtains; should the window be allowed open

under these circumstances there is little chance of air getting into a room. There is no room for questioning the fact that the ordinary close and impenetrable fabric blind is bad for ventilation, venetian or openwork blinds being, of course, hygienically preferable. I shall ask the reader to commence at once the study of Cure, under this heading Cause, by bearing in mind that removal of cause must be the first reasonable consideration ; it may, moreover, be otherwise expedient to occasionally refer to suggested cure, for argument sake, *en passant*.

Some people cannot sleep in the light of the early morning sunrise, and must have blinds down which screen it ; it is therefore ridiculous to advance the excessive argument of open-air faddists that neither windows are wanted at all nor should blinds be down at night, in face of this fact. Such people are prepared to argue that no men should wear hats, in spite of the fact that eyes which are not accustomed to much sunlight—of a person working indoors most of the day—may require some sort of shade of hat-brim if sight and comfort are to be properly respected. Arrangement of the sleeping apartment is therefore worth some thought ; and of the bed, for some people habitually carry too many clothes upon it to be either healthful or comfortable. This may be surprising, but so also do others wear too heavy clothes on their bodies during the day-time ; I have known mothers wrap up their children by layer upon layer including even impervious leather—waterproof cuirasses being carefully arranged over back and front—until the poor

little things have gasped and panted and sweated all their strength away, battling against smothering impediment. Such mothers will explain to the doctor how restless their children have been when laid down in the day-time to sleep.

The nature of bed-clothes is also worth more than passing consideration. Some cannot sleep with heavy clothing upon them. There are fortunately eiderdowns to meet this difficulty, once people know the meaning of them: they are feather-weight and warm. Delicate people cannot bear weighty bed-clothes. I have known instances of such people attempting to fall asleep, their sensations being balanced between getting cold by too little clothing and growing uncomfortable by too heavy. The poor can always use a piece of brown paper for warmth, or better still a thin sheet of waterproof, to put amongst the coverings; but this is a means that strict hygienists are bound to question, for it prevents just a small amount of evaporation which should take place in health: I would contend, however, that it is more necessary for a poor worker to get a good night's warm sleep in winter than to consider the science of evaporation too earnestly. The one is ten times more important than the other.

Cold is a cause in another respect, however, for a person can be clothed sufficiently and yet have cold feet, on account of a certain defective quality of the blood and circulation. Anæmia will give cold feet sometimes, as will debilities of various kinds. Whatever may cause extra quantity of blood to the head will give colder feet, such as brain-work late at night, there having been no

physical activity of any kind, especially when a current of cold air passes about the legs at a time when a hot fire draws its strongest under the door of a sitting-room. A person may herself feel warm in bed but still have cold feet as felt by a nurse: in crisis following fever cold feet may be felt. Conversely, one occasionally meets cases of too hot feet in bed in the gouty and rheumatic. I once attended a consumptive patient who each winter had slept with his legs protruding out of the bed, and could only obtain rest in this manner.

Noise will often be blamed for sleeplessness, as when a person usually living in the country visits a London hotel and hears the rattling traffic of early risers and horse-drawn conveyances. Very often, however, it is merely a restlessness of excitement or indigestion which has permitted such noises to be heard. There are people quite sound in health who can sleep through any amount of bustle, once the nature and purport of it is comprehended and heartily contemned. Therefore there is something beside noise to consider in particular cases. Irritable disposition, general discomfort, or delirious tendency in acute disease will serve to magnify the influence of noise. In the latter case even softly speaking in a sick room may be irritating, while the necessity for straw on a roadway will remind the reader that sick people are commonly far more sensitive to sound. There are light sleepers in comparative health, however, who are merely susceptible to unusual sounds on account of hypersensitiveness of their nervous system.

Yet, curiously enough, those who are accus-

tomed to sleep in some sort of noise will be wakeful when that noise ceases. The miller usually slumbering comfortably in the reverberation of the water-wheel has been known to awake when a tree bough has floated into the mechanism and stopped it. A clock stopping will awake some sleepers.

FUNCTIONAL DISORDER AND DISEASE

Indigestion

One of the commonest causes of sleeplessness is *indigestion*—or dyspepsia. Pain in the stomach, like pain elsewhere, will disturb sleep. There is a distress, however, in flatulent indigestion which is even more frequently provocative; the accumulation of wind, distending the stomach, and perhaps also encroaching upon the industrious heart working its best night and day, is particularly unbearable, often keeping a person awake for hours until he is relieved by sitting up, or by tapping the back or drinking something that helps dispersal. Again, it must be borne in mind that whatever causes the dyspepsia may also in a measure cause the sleeplessness; excitement and over-exertion, mentally or physically, may have been the cause of all. And the cause may be either occasional or with every-night regularity. Chronic flatulent dyspeptics will usually be found to be poor sleepers.

Food will afford just that satisfaction and brain condition which produces a disposition to sleep, when good digestion is proceeding, but want of food also will sometimes produce a restless yearning. "A hungry man is an angry man," and may

be too disturbed in mind to sleep. The digestive fluids are there, irritating for work to do. Many enquirers cannot understand how a medical scientist can advise some of his patients never to take a meal within two hours of bed-time, knowing that others habitually drop asleep in bed immediately after a heavy supper. The explanation is this, that in the former case the digestive powers are poor, while in the latter they are so good that the meal even helps the person to sleep. Moreover even dyspeptics may sleep on taking some kind of food or drink in the night; the explanation being that the food or drink serves to dilute acidity or to negative fermentation products, as the case may be, in one who is otherwise weary and exhausted; it may even disperse flatulency that has been causing distress for the time being. Again, exhaustion or debility may be the cause of the restlessness, which food or stimulating drink will correct and thus conduce to sleep. It follows that food in the night, if taken at all, had better be as light as possible.

It is important to bear in mind that chronic dyspepsia expresses a disordered state of the alimentary tract that favours auto-intoxication, from absorption of toxins produced, and this further influences the composition and circulation of the blood to an extent that produces restlessness. Simple overloading of the digestive function also generates toxæmias of various kinds—for overloading is synonymous with inability to digest the amount—discomfort being thus produced, and perhaps pain as well, leading to nausea or vomiting.

Asthma

Asthma of course causes sleeplessness, for the lungs and breathing muscles are unduly hard at work all the time the fit is on. Even mild asthmatic difficulty of breathing will cause sleeplessness, but it is necessary to observe that both the acute and the mild form are usually secondary to a defective alimentary system, the primary cause being either some amount of indigestion, or still more *ab initio* a highly strung and excitable nervous system which has created the indigestion. In many cases of asthma, therefore, three causes have contributed to sleeplessness, namely: (*a*) excitable temperament, (*b*) dyspepsia, (*c*) the labour of breathing which the asthmatic condition entails. Now, asthma may be scientifically termed both a sign and a symptom of toxæmia, for not only a study of causation but a close observation of the results of various kinds of treatment leads me to conclude that an impure condition of the blood is at the foundation of the disorder. Whether the patient have a neurotic history, or whether there are indications of alimentary defects, or a mixture of both, a wisely prescribed dietary will almost unfailingly succeed in alleviating if not in actually curing every case—that is to say if time be allowed for a gradual transformation of the blood to take place, the change of diet being gradual and carefully altered from time to time, so that as perfect an assimilation and nutrition may be maintained as is possible all the time, so far as it is practicable for careful observation to regulate. It is true that asthma is frequently

caused by growths, or chronic inflammations, or thickening of membrane within the nose, acting reflexly and excitingly; but even in these cases treatment of the general health will render the disposition less favourable to developing asthma.

Neurasthenia

Neurasthenia is a particularly and increasingly common cause of sleeplessness, especially if it has followed influenza. And there is no wonder, considering the multitudinous secondary disorders and diseases that the latter may produce in its train, not the least important and baffling to the physician being different varieties of toxæmias. In the acute stages of influenza sleeplessness is quite explicable when we consider the circulatory disturbing effect of rise of temperature, there being perhaps heart or acute lung symptoms as well. It is the neurasthenia during convalescence which causes a sleeplessness that is so distressing and persistent, often working a sustained and inexorable havoc; for nerve exhaustion brings out other subsidiary causes of restlessness in the heart, brain, stomach, and almost every other organ of the body.

The blood in influenza has become poisoned, the nervous system being thus affected, becoming asthenic or debilitated, and therefore various symptoms may be expected to follow, implicating both brain and internal organs. What makes neurasthenia, as a cause of sleeplessness, so puzzling and aggravating is this, that it involves so many organs, producing such diverse and contradictory symptoms, while in many cases there

cannot be said to be any radical disorder at all that can be got at by the usual means ; in other words, so many cases of neurasthenia appear to be nothing else, leaving only a toxæmic condition to account for the debility and distressful feelings ; thus the whole trouble may seem so inexplicable that the patient will resign herself to the apparently incurable, leaving the sleeplessness to be treated as best her medical attendant may, failing to understand what is driving her to hopeless despair.

Neurasthenia is frequently unrecognised as such, the signs and symptoms alone being picked out for particular attention and treatment. A patient may consult a medical man for indigestion, and be treated for months for it, perhaps wisely and well, while influenza and its ensuing neurasthenia had been the original offending factor : the nerves should have had special consideration in such a form of indigestion ; then the latter would have yielded all the more readily to whatever treatment had been directly applied to it. The reader will at once understand, that when neurasthenic sleeplessness is complained of, the mere administration of hypnotic drugs is no more likely to confer lasting benefit than ointment would bestow upon a superficial pain reflected from a tumour pressing on a deep nerve. In order to effect a cure, one must get right back to a study of simple initial, compound, supplementary, or intercurrent causation, in each instance, as the case may be.

One interesting point regarding neurasthenia may well be studied. Just those very measures adopted in order to support a strength which has

gradually shown itself to be on the wane for some time, may be benefiting, but also seriously undoing. Take the administration of tonics or stimulants, for instance : coffee—or the drug caffeine—will most certainly lift a patient up temporarily, and thus appear to do much good, but it will also introduce a harm which is neither seen nor understood, and may not in the least degree be recognised by the average individual. Such remedies actually contribute to the making of the very condition—the toxæmia—which is at the foundation of the whole disorder.

Food also may be ordered which is sustaining and stimulating for the time being, but, unless it is wisely selected, it will do good for the time being, but work ruination to a constitution in the future. I recollect the case of a medical man who suffered from neurasthenia, and, unwisely attempting to guide himself, he thought that leaving out of his dietary butcher's meat, cheese, and pastry, was the best plan to adopt. Nor would he take beer, stout, or wine : these were not good. Something easy to digest must be right, and he ordered himself very strong home-made beef-tea, made still stronger and more palatable and supporting by the addition of some of the commercial meat essences. He took generous quantities several times a day, together with copious libations of strong tea and coffee ; with the result that in a month or two his friends insisted, and even he himself at length agreed, that he was only contributing to his own further wreckage : his nervous and general condition became so bad that colleagues called in seemed, at first thought, to incline to the possibility

of progressive mental derangement—such was the patient's agitation and excitement shown—while his appearance presented that forlorn and dejected character suggesting utter hopelessness. Scientific dieting gradually brought him down to a comfortable level, from which he was able to build up once again, this time carefully avoiding those things which only appeared right at the time of taking but which ultimately produced further evil.

Neurasthenia may lead to hypochondriasis, or even insanity—indeed, only too often it does so. It is admitted by all authorities that this disease is on the increase, and therefore also is insanity. Most cases of insanity are due to the blood becoming poisoned. It is true that in exceptional instances deformity of skull or brain, inherited disease—and even acquired disease—will be found to be the cause of insanity in an appreciable percentage of cases, but every scientifically compiled annual record serves to substantiate the theory that toxæmia is the forerunner of most mental disorders. Let us take recent and reliable records and observations thereon. The annual report of the Commissioners in Lunacy gives the number of insane persons on January 1st, 1909, as 128,787, showing an increase of 2703 over those estimated at the same date in 1908. The rates of increase in the three previous years were 2096, 2009, and 2150. On January 1st, 1908, the proportion of insane to sound in England and Wales was 1 to 303. Also on January 1st, 1909, it was found that the proportion was 1 to 278, the increase of population in no sense accounting for this very great augmentation.

It was further observed in this report that

people of the highly intellectual class were more prone to insanity than others, as one would expect : lawyers, medical men, clergymen, and engineers were included in the highest ratios, while in the opposite scale of social position labourers, costermongers, charwomen, etc., were also included under the highest. It would seem, therefore, that luxurious living on the one hand, and poor living on the other, contribute to toxæmias, neurasthenias, and insanity ; in the one case an over-taxing of both body and brain occurring, produced by excesses in diet and mental work, and in the other a mal-sustenance of the body created by improper food and drink—particularly the latter—while the mind has also laboured under the influence of worries of various kinds, incidental to large families—domestic discomfort and insufficient resources having led to reckless drinking rather than wholesome feeding.

Neurasthenia may be divided into five kinds, according to the part mainly affected—cerebral or mental ; spinal ; cardiac or circulatory, affecting the heart and circulation ; gastro-intestinal ; and lastly sexual. The cerebral form may be more familiar to some under the name of “ brain fag.” In all these forms there is a nervous incompetency, rendering the sufferer incapable of full performance of duty, dulling the comprehension and blunting the faculty for judging acutely or acting promptly. Unpleasant apprehension may develop inordinately, the individual becoming unduly afraid of noises, crowds, or any confusing situation. Usually all forms include a tendency to irritability of temper.

Insidious asthenia beginning in the nervous

system will extend itself to all other systems under its domination ; the muscular force will diminish, the alimentary system will show various signs of weakening action, dyspepsia and constipation resulting. Headaches of various kinds will be complained of, including neuralgias and eye-strain from fatigue of ciliary muscles. The liver will naturally act indifferently. There is thus every factor at work likely to produce toxæmia, all affecting the heart and circulation in turn or together.

The brain shows further signs of being affected by loss of memory and confused judgment, diminution of interest taken in things in general being extremely marked, while ideas and anxieties regarding self become altogether absorbing. In later stages patients become extremely difficult to deal with and are not easily persuaded to adopt a line of treatment suitable to their case. Then they may go from bad to worse. Earnest persuasion may be necessary to bring some cases under curative influence, while firm guidance and insistence will be the only means likely to produce an effect in others.

Just so certainly as toxæmia will cause neurasthenia, so surely will neurasthenia either make or magnify toxæmia. The influenzas of some fifteen or twenty years ago were virulent enough to produce some of the very severest neurasthenias ever known, frequently ending in insanity, and they acted thus on account of the pernicious form of toxæmia they generated, by micro-organisms of unusual potency developing in such constitution-soils as happened to be extremely favourable.

Advanced neurasthenia has therefore a primary micro-organism toxæmia-produced causation, but also a contributing and sustaining one in the additional toxæmia produced by defective functioning in various parts and organs.

Certain imaginings or obsessions are comparatively common in neurasthenia, as are also strange impulses and mental perversions. Such is the insidious and inexorable progress which neurasthenia will make when treated wrongly, the soil upon which it flourishes being well fertilised by indulgence in what appear to be supporting and strengthening medicaments but what are really one-fourth beneficial and three-fourths disadvantageous, that a person who may appear to be suffering from no specific disease, and who will hardly be able to coherently describe his symptoms to a doctor, will one day be reported by his friends to be acting in some strange manner. A patient was once described to me by his relatives as repeatedly staring at a candle for half an hour after blowing it out on going to bed, his explanation being that he was afraid lest it should not be finally extinguished, and that a fire might result; another became obsessed to the extent of imagining that everything he touched or fed upon contained micro-organisms of various diseases, and would refuse to eat certain things, hesitating for some time before taking ordinary meals, and so on. Such cases serve to illustrate the tendency to mental derangement which neurasthenics sometimes develop.

Dread of being on enclosed premises, within large buildings, on great heights, fear of crossing

roads or walking over bridges, are all manifestations of neurasthenia verging on insanity, and are usually the outcome of impure blood circulation, as is so conclusively demonstrated by the favourable effects obtained by a treatment that is directed towards clearing the blood of defects.

The neurasthenic is often irritable under the slightest noises, sometimes so bad as to appear mentally weak. He may even threaten to take some violent action. In such a case the eyes may appear more prominent and glaring. Some authorities consider this tendency to extreme irritability to be due simply to an increased acuteness of vision and hearing, but close observation of a large number of cases has convinced me that it is the general uneasiness or distress of toxæmia—an extreme fidgetiness which the condition produces—that really makes simple noises and sights the occasion for making the complaint that such really intensely affect them. In advanced cases the patient will not lose a single opportunity for finding fault and complaining: if it is not the stuffy room, it is the draught; if not the food, the drink. If a drive be taken, it is the weather, the wheels, the road, the coachman, the wind—everything will be turned to in order to find an urgent grievance out of it.

Nor can one altogether blame patients for what appears at any time to be an exaggeration or even an invention: the severity appears to them as such—indeed, is such in their own minds, multiplied by neurotic urgency and perversion. They know they are often a great trouble to relations and friends, and in their clearer and better moments

they deeply regret the inconvenience and annoyance caused, but they cannot help themselves. They must be helped, the real condition being recognised and the true causation fathomed upon which a successful scheme of treatment may be based.

Neurasthenia attacks the most intellectual with the greatest severity and intensity: those who have been most active in the past will, to their own mortification and their friends' despair, develop into helpless chronic invalids under its remorseless and malignant power for crushing out and stifling all comfort and happiness of life—so slowly as a rule as to make the misery of it appear as some protracted and undeserved punishment. “Why have I been reduced to this?” a sufferer will exclaim, “once so active and energetic, and who have done so much good work in my time?”

The spinal form of neurasthenia will include such symptoms as numbness, tingling, pricking sensations in various parts of the body, as well as indefinite pains. Walking may be of a slightly paralytic nature, and dizziness will sometimes help to fill the cup of misery to the very brim.

In the cardiac form the irregularity of heart-beat is often very distressing, from palpitation to actual stopping of beats. Most unpleasant pulsations are also felt by some in the neck and head, producing the most unhappy sensations that death may be imminent or that a falling-down and total collapse may ensue. Flushes and sweatings are also complained of at times. Even suffocating sensations may suddenly come over a sufferer;

in fact, every symptom that might be calculated to alarm and create the most hideous forebodings is possible in neurasthenia.

Now there is a point worth particularly noting at this stage, namely, that neurasthenias are of all grades and degrees, presenting signs and symptoms indicating the greatest severity, and constituting a condition that is practically indistinguishable from insanity, but, on the other hand, being so mild but yet so very capable of giving trouble, so subtle and concealed that many might fail to distinguish it. There are thousands of neurasthenics going about daily, ailing something, but they know not what; simply enduring symptoms, applying quack or home remedies, and mayhap visiting the doctor complaining merely of one particular symptom. Nor can you altogether and always blame the latter for treating only the symptom: he might otherwise be accused of making a mole-hill into a mountain. If he do not make light of a matter perhaps his patient will proceed to consult another medical man, who will, either intentionally—knowing the risk he runs of losing a patient—or ignorantly, not divining the fundamental fault—or even so-called considerately, not wishing to frighten his patient—give the latter very little information, and simply and quietly recommend some new form of treatment that at least satisfies for the time being. Indeed, many poor-class doctors are so busy compounding medicines for such wretchedly small fees that they have no time for dipping deeper into causation, and must needs get on as fast as possible, improving symptoms and doing their best.

It is just those cases in which there appears to be "nothing much the matter" that ultimately very gradually develop into something very particularly the matter in the end—and perhaps hopelessly, if the earlier stages have been spread over some few years. It follows that the earlier neurasthenia is correctly distinguished as such—but above all its particular form and especially its true initial cause—the better chance will there be of preventing the later stages and of effecting cure.

There are other neurasthenias besides the influenza-toxin form, such as the so-called traumatic variety following accident, but space will not permit special reference to each.

The reader can now realise how impossible it will be to understand the causes and cure of sleeplessness, if a person's state of ill-health remain itself unfathomed. To cure neurotic or toxic sleeplessness it is necessary to delve very deeply into the constitution and find out even hereditary tendencies.

Various other diseases

Heart disease is frequently attended by sleeplessness, not only on account of the discomfort of irregular action of the heart, but also on account of the distress of symptoms such as breathlessness, cough, pain about the heart, and toxæmia headaches.

Brain disease must naturally be included as a cause of sleeplessness, inasmuch as mental derangement involving agitation, worry, and excitement, is bound to follow in one degree or other. Various forms of mania and melancholia will in

turn both create and be aggravated by indigestion and disordered circulation.

Lung troubles of various kinds produce difficulty of breathing and disturbing cough, as also toxæmias in the later stages.

Fevers of all kinds produce toxæmias with their distresses, while pain in parts will contribute to general restlessness. Should a high temperature be present delirium may add to the composite causation.

Diseases of the liver and kidneys produce their own particular pernicious toxæmias, causing discomfort and restlessness.

Bladder and kidney derangements will produce frequent necessity for passing water, disturbing sleep. I have known of a case of advanced disease—when operation was refused—in which the patient required to dribble water every twenty minutes or so during the day and night, and could only be relieved by large doses of morphia in suppositories, sleep being impossible excepting here and there between times. This was one of the worst instances of disturbed sleep that I ever met, even morphia being dreaded, and occasionally objected to for as much as a week on end. Such is a very extreme case, but there are many minor instances, the sufferer requiring to relieve himself several times in the night, which indicate not only a local irritability but a general disorder which demands proper treatment.

Irregular Drinking Habits

Certain strong, stimulating drinks, whether alcoholic or consisting of drugs, tea, coffee, or cocoa,

when taken to excess are both direct and indirect causations; they produce not only temporary excitement, but permanent disorder of the heart and blood-vessels; and through further poisoning the blood when taken habitually to excess they swell the list of influences which ultimately produce sleeplessness. Again, in this instance the excitement, or the disturbing heart-beat, or indigestion may be entirely blamed, and, indeed, the former may have been present to demand the drinking of something. But, however it may be, the toxæmia will be generated; excess is cultivated, and continued repetition works its evil way. Excess of tobacco, influencing the heart, must also, of course, be included as a causation.

The critical reader will attempt to argue himself into advantage here by recollecting that even alcohol and tea sometimes help sleep, but I answer that they do so only under the conditions previously referred to, sometimes temporarily alleviating distress and helping sleep, but always heaping up more trouble for the future. Opium also helps sleep if it assuages pain or anguish, but it will as often excite and cause sleeplessness. The morphia-maniac, sleepless on account of toxæmia, is rendered worse by morphia in the long run.

Sexual Perversions and Excesses

It is not in the least surprising to a scientific medical man to note that wherever one gets conditions including hereditary neuroses, acquired neurasthenias, various toxæmias produced by ignorantly pursued hyper-stimulated regimes, there are we certain to find a large percentage

of sexual excesses or disorders. And when one realises that either one or the other may be both cause and effect in turn, each all the time aggravating and turning upon the other, then there can be no wonder that certain victims are moving round the vicious circle of varied excesses all the time with little chance of escape.

Sexual abuse, of whatever kind, whether the method be perverted or whether it be simply excessive under more or less legitimate and married circumstances, is a fruitful and invariable cause of a most insidious and damaging form of neurasthenia. Excessive-sexual is practically synonymous with neurotic in physiology and therapeutics; why this should be so it may be difficult to determine, but I would vouchsafe the explanation that sexual sensations involve intensified nerve influence, as at first intended by nature to assist in propagating species; thus excitement and increased energy attendant upon sexual pursuit appear to be a means of assuring concentration upon a very definite object for the time being, provided in order to make success the more certain. Similarly and conversely, nothing conduces so much to abstinence and continence as a rigid cultivation of the latter. Habit in sexual life is consequently very much like habit in regard to everything else.

Again it is important to note that not only do sexual perversions or excesses produce neurasthenias, and occasionally permanent mental derangements, but they themselves are induced by neurasthenias and mental derangements. Sexual excess is very frequently a symptom of mental

disorder; and even in neurasthenia the most chastened and hitherto correct-living people will sometimes develop sexual desires and thoughts which are at once astonishing and alarming to their friends.

It seems to be part of the price which humanity must pay for its advancement that disadvantages of distress and disease should ever be present, notwithstanding the extraordinary powers which are ever being newly developed and perfected to assist progress. Just as it is given to us to make headway, so do increased tendencies to drop leeway manifest themselves in so many. Greater progress, greater insanity: this is one of the great paradoxes of present existence. There is hardly any pleasure apparent without some pain sooner or later. Only self-denial appears to be capable of bringing plain-going happiness—but here again we meet another irony—another paradox of existence—so plain-going that big-brained and ambitious man can hardly be satisfied with it for long together.

Abnormal sexual conceptions are very frequently generated in school life, where many of the young are congregated in such manner that there is abundant exchange of immature idea, and even wild speculation, in minds that are developing and enquiring most interestedly and diligently about everything. Given a generous and perhaps too stimulating diet, with natural feelings peculiar to puberty, youths—or maidens for that matter, but not so frequently on account of the nature and order of things—will easily pursue a vicious and incontinent course which will deflect their

better senses, misleading them along prejudicial paths all their lives through. Good schools, therefore, take full cognisance of risky possibilities and put out sensible safeguards accordingly.

Thus may a certain form of neurasthenia have its foundation laid at a very early age, and, one bad habit begetting others, a constitution will have little chance in the long run if subject to various perversions and excesses. Many stories of life-long ill-health and wretchedness have I investigated in those who have themselves admitted their faults to have commenced at school.

Haig was right when he pointed out that many acts of sexual perversion or excess were traceable to collæmia, or blood-poisoning due to over-stimulating diet. Criminal offences are most of them the result of this blood disorder, provoking the sufferer to actions which would have been impossible under normal conditions.

Self-abuse grows upon the neurasthenia it produces, until the victim cannot even resist what he eventually learns is harmful; later on either actual loss of virile power and incapability of performing proper function, or even actually insane predilections, succeed the gradually developed abnormal fancies and sensibilities, to the end that the unnatural act is the only one sought, being preferred to what should be sufficiently satisfying and equally gratifying and right by nature. Thus do male women-haters come into existence, or female men-haters, as the case may be. Neurasthenia itself creates some amount of sexual impotency, as though nature intended even in this instance that the unfit should not survive.

The following chapter is devoted to treatments of various kinds, but it is worth while mentioning here that in no class of case is hypnotic subliminal influence more beneficial than in cases of sexual perversion or excess, and there is at least one particular reason for this: sexual matters being so very secret, as a rule, the deeper mischief is arrived at before any remedy or preventive could have been applied; now, when once found out, a patient may wish to have his secret preserved by faithfully following out such professional advice as may be given him; hence he is in the best state possible for hypnosis, while the operator is able to present such a clearly limned picture of his condition, and of the pains he should take to cure himself, that the very best and most lasting results are usually obtained, the victim being ultimately restored to hopefulness, happiness, and strength.

Sexual abnormality is sure to contribute to general disorder making for constitutional weakness, and consequently to restlessness, nervousness, and sleeplessness; and when it has led to neurasthenia a doubly effecting influence for evil will be at work.

VARIOUS OTHER CONDITIONS

Pains

The pains, shoots, and spasms of disease must not be forgotten as a cause of sleeplessness. Rheumatism has an unfortunate rule of presenting its worst pains at night, when a patient has just got warm in bed. It is surprising, also, how slight rheumatic pains will keep a sufferer awake,

so slight as to be disregarded next day. Patients will thus often consult a doctor, not so much for rheumatism as for inability to sleep on account of perhaps a knee, a shoulder, or even fingers. The pain of gout is well known to attack a man usually during the sleeping hours. The reader will thus far have discovered that scientific reasoning will bring one down to much the same conclusion in the end—that nearly all sleeplessness is due to toxæmia or impurities existing in the blood, for all the diseases named yield their poisons passing into the circulation, while at the same time they contribute their own peculiar local mechanical or irritative manifestations which may easily earn the principal blame: it should be remembered that gout and rheumatism are diseases having painful symptoms the result of a form of toxæmia or blood poisoning; most readers will be familiar with the mention of uric-acid poisoning.

The Circulation

High Arterial Tension—that is, too much blood in the vessels, to put the condition plainly—is a cause of sleeplessness, inasmuch as it is associated with disturbing heart-beats; but it is better also to understand the disorder as being originally created and then permanently sustained by impure blood, then its full significance will be appreciated.

Low Arterial Tension will also cause sleeplessness, and sufferers will often obtain relief by either stimulating food or drink; this provides a specific instance in which sleep may be obtained by the ingestion of some kind of food or drink.

Strain and Irritation

Sight Failure, from astigmatism or other error of refraction, entailing strain of the vision during the day, with all the nerve disturbance, uneasiness, neuralgic pain, worry, and even indigestion that may result, is often a cause of sleeplessness—and one that is extremely likely to be overlooked. I have known cases in which glasses have been worn, said to have been prescribed by reliable consulting oculists, but which have been unsuitable. The fact is that the eyes of invalids may somewhat rapidly undergo change, thus necessitating frequent examination.

Worms sometimes cause restlessness at night in children, and as a cause often escape detection.

Irritation of the Skin is frequently a cause, and may be created by eczema or some other skin disease. Here also we have to deal with toxæmias, which are usually at least the predisposing cause of most skin diseases. And again, it must be borne in mind that the *causa causans* will itself tend to produce restlessness, as well as the mere discomfort of itching. Even an intense irritation of private parts may be the result of disease, such as diabetes—itsself indicating enough toxæmia to cause severe sleeplessness.

Growths in or near the throat, including those commonly known as adenoids, will cause sleeplessness in two ways, by obstructing the passage of air in breathing, making a person snore, and by reducing the general health so that debility of various regions is present, including indigestion,

anæmia, with an attendant constipation, there being of necessity some degree of toxæmia.

Tumours and malignant growths in various regions will naturally cause sleeplessness when they produce pain or disordered circulation. I recollect a case of headache and sleeplessness that baffled some of the most expert consultants, until a very small growth was found too deep in the neck to be discovered by ordinary examination, but enough to involve nerves to the extent of producing the most agonising and persistent neuralgic pains about the head.

Constipation

Intestinal stasis is a cause of general discomfort too well known to need much explanation in this chapter. Its influence upon the sleeping powers may be slight or severe, according to the nature of the case. In some severe instances patients will awake every thirty to sixty minutes throughout the whole night, hardly getting any sleep. This disorder will be dealt with further in the chapter on Cure of Sleeplessness.

Worry

Of all the causes of sleeplessness none deserves more decisive and emphatic black-marking than *Worry*, for there is truly a multitude of evil possibilities in this mental strain. Not only will worry keep awake *per se*, the cause of it provoking incessant and endless turning over in the mind a confusing and brain-racking mass of heterogeneous and excitedly arranged considerations, conclusions, and resolutions, but it will, when sustained, more

certainly and readily produce a malignant train of other disorders, each ultimately capable of contributing appreciably to restlessness of both body and mind.

Let us consider a bad instance of sleeplessness commencing with worry, which itself may have been created by misfortune, so undeserved, so unexpected, so poignant, that human nature staggered under the weight of it: the whole even-running progressive success of half a lifetime may have been kicked over ruthlessly and relentlessly by one of those merciless turns of events which inexplicably enter into the lives of certain unfortunate individuals, perhaps in a few days, it may be in a night—a fire having taken place, an earthquake—literally or figuratively—an upheaval such as is created by gigantic defalcations of a falsely operating member of a large firm, for instance. Take also the case of an immensely successful commercial or professional man finding his son or daughter disgracing him, hopelessly and irreparably; or it may be a husband being dragged down by the wastefulness, misconduct, or mental collapse of a wife—or *vice versa*—we need not hunt long for examples of worry. In such cases it is impossible to carry on without undisturbed nights any more than to expect unruffled days; there are too many things crowding in upon the mind—too many rearrangements to make and important plans to lay out—without delay—no time for rest, hardly time or opportunity to eat.

Certain untoward effects of such unhappy conditions are almost at once manifested in the mind

and body, they may include exhaustion from over-work, headache, or some other painful sign of interference with even-running functional performance. Loss of appetite is also sure to come, producing its own debilitating effects. There is now extra call for activity, but a weakening tone to sustain it. Something must give way under the strain. It is in such conditions—especially when there is no sleep to rest every aching portion of the anatomy—that serious disease may enter to make more misery. Such is the soil upon which the dread disorder diabetes takes root and flourishes so rapidly; such is the state that invites even a sudden apoplectic seizure, after the circulation has been seriously disturbed and the heart has stampeded under the dismay of its host's discomfiture, unbridled, beating its wildest by its own natural effort to try and keep things going.

It is not necessary for worry to be extremely intense in order to work decided mischief; it may be so little as to be unrecognisable to either the sufferer or anyone else; in fact, the sufferer may dispute the fact that it is possible, and absolutely deny it. A medical man, however, may discern the stamp of worry upon the mere countenance of a patient, while the latter could never realise it until the disordered health had been put right.

The sleeplessness complained of will set the medical man further enquiring; the finger-posts of signs and symptoms and the replies to studied questions will lead him on the right track. He orders a holiday, and medicines, and the whole

trouble disappears in mild cases, the patient afterwards quite readily and cheerfully acknowledging the correctness of the diagnosis and thanking goodness that the advice given had been so prompt and firm.



CHAPTER IV

THE CURE OF SLEEPLESSNESS

NOTE.—Here and there principles, theories, propositions, or sentiments may be found to be referred to more than once in different parts of the book. This has been done purposely, for the reason that the author is so well aware that a book of this kind will frequently be consulted in places by readers in certain states of ill-health.

THERE are two great classes of treatment of insomnia, the one being directed towards conditions, disorders, or diseases of which restlessness is a symptom, the other acting directly upon the brain and nervous system by relaxing abnormal tension. Either is powerful and important, while it follows that an exercise of both in certain cases is of corresponding value. The reader will hardly need the direction that either the former itself or a combination with the latter will be the more permanently curative.

Much regarding cure has already been suggested under the heading Cause, just so much as will afford the reader information enough to now make a deeper study more interesting and profitable.

This chapter should not be read by anyone who has not previously read the one on causation. The suffering reader will only be partly informed if he attempt to save time by first picking out this chapter. A study of the cure of any disorder or disease should commence at understanding causation. This is just about as easy to comprehend

as the oft-repeated "Prevention is better than cure." Know the cause, prevent it, and you obviate results that might be expected.

The reader will do well to bear in mind that of various remedies there are those acting directly and indirectly. Usually the direct measures employed are not so beneficial finally as the indirect: morphia injected may take away the pain of rheumatism, acting directly; but it is better that salicylate of soda should so alter the blood that the nerves are no longer excited to pain. It also follows that both direct and indirect means may well be employed—as indeed they are very frequently by wise practitioners—when it takes some time for the indirect expedients to act. Direct measures are of a more temporary order, while indirect involve a correction of the *causa causans* through which the whole economy is influenced and are therefore more permanent in effect.

Let it be inwardly and completely digested that all people are not alike, either in their constitution, temperament, disorders, or diseases; nor will they be alike in the effects produced by treatments. Take two persons, normal in appearance, examine them superficially side by side; you may be able to discern no difference between them, as regards their health or human nature; yet give the good sleeper an apple to eat at bed-time and there may be a sleepless night, give the other a similar apple and his recent complaints of sleeplessness will, by this one simple remedy, be converted into an astonishing confession of "splendid night." Give both $\frac{1}{32}$ grain morphia, and the one will be restless while the other sleeps sweetly and happily and

deeply. Here is where the doctor comes in ; it is his privilege to be able to decide what will suit each individual case, that is to say if he have a mind and an experience to enable him to fathom initial, compound, or complicated causation.

Therefore, in case this chapter is looked for alone by the eager sufferer searching for hand-books which may serve to throw any light upon the subject, and wishing to waste no time over the earlier chapters, let me earnestly repeat the advice to him or her, to first look studiously over the pages dealing with causation.

Clothing

The question of personal comfort during night hours might be thought far too simple and elementary to touch upon, yet quite a number of people will be improperly covered in bed and not know it—of course, not comprehending further that it will influence to some extent their capabilities of obtaining sufficient sleep. Some might argue that so long as a person is warm, why worry ? But the warmth may be secured by a distressing weight of material which produces restless discomfort. The intelligent reader will do well to study the simple, as well as the more profound scientific causations and cures, and a glance at nature may bring into the thoughts some interesting and useful lessons. Observe how animals and birds have their outer covering regulated. Note the simple garden robin in winter, how it puffs out its feathers at such time as the earth is frozen and white with snow ; for so it keeps perfectly warm in almost precisely the same substance of suit as for

summer. By so doing it makes air interspaces between the feathers, and a non-conducting adjustment automatically acting. Also note the fur-coated animal, perhaps more thickly coated in winter—but what a coat! So well ventilated and also so capable of adjustment according to wind or weather, each hair, like each feather of a bird, moving either more perpendicular to the skin or more slanting according as temperature reflexly indicates.

Man does not depend upon skin-growing hair for warmth, but upon the wool and feathers of animals and birds collected and woven suitably in fabric form. Close textures are not so healthy to wear as open-weave, as nature bids where nature can. Wool is better to wear for warmth than mackintosh, eiderdown as a bed-covering is better than mackintosh or heavy, closely-woven material, for those who can afford it. These things serve to illustrate. But man himself used to have his own hair for covering, as is proved by his developing goose-skin when he is chilled: this manifestation is caused by the effort rudimentary hair muscles make to move the hairs to a more erect position so that greater warmth shall be derived. The same movement and goose-skin is perceived in man when frightened. In animals the hair also stands erect before fighting, for purposes well known to scientists and observers of nature.

Cold feet, notwithstanding a warm body and its sufficient clothing, should be met by special covering in the form of very open-work woollen material. I would advise a sufferer, however,

not to forget that a brisk walk before retiring to bed will help the circulation, if such can be arranged conveniently. Massage is also good. Warm bathing may suit some, but cold water will be more effectual if followed by vigorous rubbing.

But, scientifically speaking, cold feet are a sign of circulatory disorder, and it would not give me any more satisfaction to simply tell the reader how to warm the feet than it would afford a minister of religion to advise a man how he may get over his worry—of having to find money for an expenditure that amounts to more than his income—giving him a shilling out of the poor box. We can either of us administer some temporary remedy, but shaking our heads the while that it were better to make conditions which did not compel corresponding worrying sequences. The defective circulation must be corrected if due to anæmia, weakness of the heart, or poisoned condition of the blood, by suitable treatment for these conditions.

The proper side to sleep upon is that found to be most comfortable. On the back may give dreams and nightmares. The right side is always found the best by those suffering from stomach or heart troubles, for in this position the heart can work with the least hindrance from other distressed internal organs near it.

Humans are creatures of habit, and adopt conventional usages slavishly, and sometimes as stupidly as though instinctively impelled. There are many who must just go to bed from warm to cold rooms as their forefathers did, and dress

the same and do the same; nay, they may degenerate and do even worse, for our grandfathers all kept bed-warmers, many of the poorest also, under the simple sense that in cold weather it was not comfortable to get into night attire in a cold room and pass into chilly sheets. Why should brainy humans suffer in this way, excepting for their having developed squint-perceptions? The fact is our usual methods of warming houses and rooms are too primitive—just as our smoky underground railways were until foreigners came and showed us better.

The old-fashioned warming-pan was useful—so much so that I even hear some of the more sensible housekeepers demanding them again, and furnishers even putting them in the windows for sale—for use, not for ornament.

Hot bottles are fortunately common and cheap enough. They are easy and very effectual; but they should no longer be looked upon as only suitable for the sickly. Every bed that once would have had a warming-pan put through it each night should to-day at least have an india-rubber hot-water bottle—for the comfort of the robust as well as the unhealthy. Cold provokes indigestion, which keeps people awake; therefore it behoves the thoughtful to keep cold out by whatever reasonable means the present century's inventors may afford us.

Nor should the time-honoured habit of sleeping between sheets be strictly adhered to by those who do not readily get warm in bed. The custom naturally arose what time the perfect bed developed from rush and rug accommodation of prehistoric

man ; white was chosen as indication of cleanliness, its change of appearance giving the signal for necessary re-purification by washing in water, its thinness helping in this process—just as was also the case with underclothing. Later, however, when thin woollenous textures were fashioned, wiser wearers thought of making cautious and slight departures.

Many people now sleep between blankets—better, much, than feeling chilled for hours ; but I see no reason why non-inflammable, thin flannel-ette sort of sheets should not largely take the place of smooth shudder-surfaced linen in cold seasons. Thus the greatest objection to rough-surfaced flannel would be largely removed in thin flannelette, namely the difficulty and expense of washing so frequently. Much more sensible underclothing is now worn during the day than formerly, and this should gently show the way to those who find it difficult to depart from mothers' and their grandmothers' ways of going on.

The male sleeping suit—pyjamas—adopted in recent years, suggested from abroad, and now modified in children's suits, is really a desperate departure from the old linen night-shirt, in sheer spite of the linen bed-sheet custom, while it also enables the wearer to move about cold rooms more comfortably. Originally suggested in hot countries, it had the additional advantage of absorbing perspiration. But those who most need rational reform are yet women, as regards bed and personal night attire.

Indigestion or Dyspepsia

Indigestion causing sleeplessness may be treated by home remedies to some extent. Careful feeding, upon what has been advised or found to be the wisest, and cultivating such habits as tend to maintain the best general health, should be within the power of those who have enough knowledge and ability to exercise self-control and mastery over themselves. Those who want help should consult their medical adviser, who is able to guide and strengthen, not only by medicine, but by plain explanation and demonstration.

As a home remedy a glass of hot water may be taken on retiring; this will serve to dilute either excessive secretions or fermentations, constituting a form of flushing to the alimentary tract. If the dyspepsia be of an acid nature, fruits, malt liquors, and wines should be avoided. Gouty people should also eat as little butcher's meat as possible. Avoidance of fat will help in certain cases, while some carminative, such as peppermint or oil of cajuput—five drops on a small piece of biscuit—will often have the effect of giving a better night when taken just on retiring. Some sleep better with food taken near bed-time, others not; everything depends upon the kind of indigestion from which the individual suffers. The last meal of the day should be eaten at a very quiet table; hurried meals full of animated conversation are bad for digestion; real argument may give disastrous results. How few people ever imagine that a restless night, with vomiting even, is often caused by heated conversation at the supper-table!

Bicarbonate of soda in water will often help in a case of acid dyspepsia or heartburn ; but I could not recommend any such remedy to be relied upon and repeated over long periods. Medicinal remedies should never be considered anything more than merely temporary helps ; if required for long, then more scientific advice should be sought, so that deep and permanent benefit may be derived.

Tea and coffee after food are bad, inasmuch as they indicate, as a rule, an overloading of the stomach, especially when they are strongly desired. They may appear to assist digestion, it is true ; but they are helping to create chronic dyspepsia in the long run. They afford temporary pleasure by lightening the heavy feeling which a meal digesting with difficulty produces, but it is really wiser to carry neither the overload nor the stimulant which alleviates.

Tea and coffee are specially bad on an empty stomach near bed-time. They are both well known to be amongst the best means of keeping one awake. It is therefore too absurdly paradoxical, for even the lay reader to pass without questioning, for anyone to argue that these stimulants help in procuring sleep : it is a poor and perilous constitution—with a miserable prospect—that finds this argument hold good to his satisfaction. If a man declare he cannot sleep unless he has taken whisky or tea to temporarily soothe, then there is more trouble for him ahead. He may derive temporary gratification, and even sleep, but he is really creating a condition that will be found worse than the first. It is sometimes quite remarkable what extraordinary

ideas are accepted as rational and permanently practicable. A well-known millionaire once declared that it was quite the right thing to do, for those who could afford it, to begin each day with a glass of champagne and port mixed. He, naturally, did not live very long to enjoy his wealth. The argument is also quite commonly advanced in the Colonies and India that the climate necessitates full and free allowance of stimulants; while science easily proves the contrary, and experience is daily confirming it, that the less you eat and drink of a stimulating nature in hot countries the longer will you be able to live there, or anywhere.

As to getting up in the night to make tea or coffee, as is commonly done; those who have occasion are going from bad to worse, and had far better allow someone else to take care of them. The furthest procedure that domestic direction and effort should adopt in the night should not extend beyond hot milk or hot water, or those simple remedies previously named. It follows that alcoholic drinks are merely temporary and trifling in the face of insomnia, being bound to do as much, or more, harm than good in the long run. But unfortunately, it is the long run that cannot be prognosticated by the lay sufferer; so long as something can be found to answer for the time being there will be little thought as to what the future has in store. But the medical scientist knows—who observes people at all ages and under all conditions.

Those who are not total abstainers may quite legitimately take a “night-cap” before going to bed, as part of their daily regimen, and if they

like to believe that it helps them to sleep I cannot see that it is anyone's business to interfere with the argument. What I clearly and deliberately counsel, however, is that it is not wise to conclude that insomnia should be treated by stimulants—for all stimulating treatments, when implicitly relied upon, are likely to prove inefficient after a time, unless more in quantity be taken; and more will mean a cutting off of an evil at one end but an adding on of worse at the other, nearer the end of the span of existence. And it is a wise man who knows just how much harm is being done at the same time that he sees and feels some good coming for the moment.

A careful and thoughtful sufferer should ascertain just what food suits him best at various meals of the day, and should keep to this standard if possible; this almost might be too platitudinous for publication were it not for the fact that quite half humanity appears to neither know nor care that certain very simple steps taken will often make a difference of ten or twenty years in the length of a life; and as to personal sensation, one slight change in diet may make all the difference between comfort and constant distress; while in capacity for acquiring or earning, a man properly fed is always worth from 20 to 50 per cent more than when improperly—and I refer particularly to kind and proportion of foodstuffs taken.

Nor should anyone go to an opposite extreme. All extremes are bad if adopted: they have this amount of good in them, however, that they serve to indicate the reasonable amount between them that is really the best. Excessive meat-

eaters, very rigid vegetarians, unrestrained drinkers, farinaceous faddists, and long fasters are all wrong ; but they do an immense amount of good. They experiment and suffer—for “the great good cause”—while the quiet, careful, and shrewd observer sees the best of the situation and selects the moderate means by which the best results are to be obtained over the longest time, and further thinks and encourages others, so that reliable principles shall be handed down for the advantage of posterity. I have known those who had once taken too much, degenerate to taking too little : there is always danger in pursuing to enthusiastic extremities.

If a person have any difficulty with digestion it is advisable to abstain from either mental or physical labour for some twenty to thirty minutes before a meal, and again afterwards for a like period. It is true that some people do not feel any advantage from a sleep after a meal, in such cases there exists a toxæmia which gives a fulness of the head and heaviness throughout the system : I therefore only advise such abstention from labour as will allow very slow walking or light reading, or better still a diversion to something that is interesting and that makes a pleasant change from any strain that may be entailed by necessary bread-winning employment.

Asthma

Asthma insomnia is cured by such measures as can be taken for bringing the attack of asthma to a close. Just what those measures are cannot well be dealt with in a short treatise : suffice it to mention that most cases of asthma can be success-

fully treated by dieting. But it must be borne in mind that the most carefully arranged diet is not likely to cure asthma in a week or two. It may possibly cure at once—I have myself had cases in which the sufferer never had another attack after I had written out regulations for her, and I am sure other observers could give examples—but considering an asthmatic tendency has required many years to develop, in the majority of instances, it will reasonably necessitate many months' influence of changed diet to alter the blood and nervous excitability—upon which the asthma may have been dependent. And, be it known, if asthma is purely inherited and has not been created by improper diet, it will usually be successfully treated by slowly altered diet. Improper food therefore causes asthma in its acute and immediate manifestation—it will precipitate an attack—but it also creates the abnormal constitution which is more liable to attacks; thus it is a predisposing as well as an exciting cause. When it is appreciated that some cases of indigestion are caused by inherited nervous temperament, then the reader will understand the wisdom of a physician who, when dealing with sleeplessness and asthma—as also in the case of certain other diseases—will go right back to the nervous constitution of the patient, and by treating this will regulate digestion and alter the nature of the blood, benefiting the asthma and building up the system to better all round. Here, again, it may be repeated that sleeplessness is always a symptom of some other disorder: there is no such trouble as sleeplessness and nothing else, unless a person have a reason

for not wishing to sleep, or unless there is acute temporary agitation of mind. Growths or thickenings in the nose causing asthma should be operated upon; yet I have known cases in which the asthma has persisted, notwithstanding operation, indicating the necessity for general treatment.

Constipation

This condition, an evil in itself, is worthy of special study as the cause and aggravation of so many other disorders. Defective intestinal activity is a much more common cause of sleeplessness, primarily and secondarily, than is imagined by the laity. Primarily an acute toxæmia may result from it, or secondarily a disturbance of the nervous or vascular systems, causing discomfort or restlessness.

Most people have experienced, at one time or another, great uneasiness day and night when a movement of the bowels has been desired and not attainable; even irritability of temper may be displayed under such a condition. The influence of constipation upon the blood circulation of the abdomen may be marked, moreover, and painfully manifested by the development of piles—a varicose condition of the veins. A still more serious effect is dilation or disease of the large intestine, while such painful and dangerous conditions as fistula and appendicitis may frequently be traced to intestinal stasis. But, secondarily, under *chronic* constipation, a system is bound to become disturbed in nearly all regions, especially the liver, kidneys, and stomach. Constipation will certainly contribute to congestion of the liver and also to dyspepsia. Hence, from the condition producing

its own toxæmia through absorption, are derived other toxic contributions. Not the least obvious discomfort and toxæmic symptom will be headache, so common and familiar to sufferers from constipation.

Now, nothing will convince both the scientist and the lay reader that constipation is a real fundamental evil better than the effects of treatment, for very frequently a whole train of miserable discomforts and afflictions will disappear once the bowels are properly and *naturally* regulated. In the case of piles, for instance, I have known many cases in which this condition has been considered incurable, excepting by operation, until *normal* action of the bowels was secured, and then there was no more trouble. Such are object lessons of great magnitude and importance.

Constipation is often secondary as a causation, however, for there are specific conditions of the system which cause the trouble—fevers, for instance. But the importance of the constipation factor is very clearly seen when in any febrile condition the bowels are relieved by medicine, improvement in every way being usually manifest at once.

Not the least remarkable point regarding constipation is the fact that many people do not know what it is, consequently they do not always realise that they suffer from it. Departing from the standard of normal performance of function, which may be laid down as at least one evacuation of the bowels a day, a large proportion of humanity are only relieved four, three, two, and many even only once a week. Anything less than seven times is a degree of constipation, and will there-

fore cause a degree of discomfort and disorder elsewhere in the physiological economy. Where the number is less than three times a week without medicine, or when no évacuation ever takes place without medicine—or when the amount required repeatedly exceeds an ordinary dose—then the degree comes under the category of cases actually needing special treatment. When enemas are needed habitually the condition has become a desperate one, and of course needs special treatment. When less than three times a week there will be a degree of poison absorption present as a result, and various signs and symptoms of such, while the patient's condition is one which is all the time inviting further secondary disorders.

It redounds to the discredit of both patients and certain advisers that many know they suffer from constipation and yet dare not seek further advice for it, for the reason that they dread purgation; and inasmuch as piles are often precipitated by injudicious dosing, the dread is all the more intense.

Again, there are not a few sufferers who are ashamed to admit constipation, and who will reply to the doctor that they are “all right in that way.” Needless to say, this type of negligence and injustice towards self deserves all the trouble it brings upon itself.

How little is known by the mass of humanity regarding the nature and cure of constipation may be judged from the fact that it is so appallingly common; but, above all, the mystery and ignorance regarding it are demonstrated by the extremities to which scientists of standing and even eminence are driven in their efforts to grapple

with and cure the condition. The following is an extract from an article written by the present writer and published in a medical journal :—

“THE KNIFE OR NATURE

“The latest theories of Professor Metchnikoff and the recommendations of his assistant, Dr. Distaso, are interesting. The former alleges that certain disorders and even diseases are caused by bacilli lodging in the large intestine ; that abnormal putrefaction caused by these bacilli should be inhibited by introducing other less harmful bacilli, which shall prevent the growth of the more harmful, and to this end he further suggests the ingestion of sour milk repeatedly. Dr. Distaso has found that in cases in which the large intestine has been cut away by the surgeon, great improvement in health has followed.

“That the latter should have declared—as referred to in the public press—that every child should have its large intestine and its appendix removed when it is two or three years old, just because poison-producing bacteria have been found in the large intestine of certain individuals, would appear to illustrate a successful scientist rushing headlong incontinently to conclusions and resolutions beyond all reason. Only madmen could go one stage further, and suggest that they should commit suicide because there are evil germs everywhere, in the air, even in the best of food that may be put before them.

“Metchnikoff has done great good by investigating the nature of evil-creating intestinal bacteria, and by suggesting sour milk as a remedy that may help in curing various ills and add many years on to people’s lives ; but enthusiasm and ardour, displayed also by his assistant, may lead them both and their disciples to pitiful and alarm-

ing extremities if a check be not soon put to their enterprise. The suggestion made that a plentiful supply of comparatively harmless bacilli should be pitted against any evil ones existing, so that the latter may not be able to thrive, is eminently reasonable and may even be strictly scientific; and one might have expected further measures equally scientific and logical to have arisen from such premisses; but that the whole area of disorder should be cut out altogether is a proposition not becoming a reliable researcher supposed to be looking after all that makes for the best interests of humanity. Where would such ruthless eradicators end if full and free scope were afforded them? Experiments would next be made to show that we were all better with only three feet of intestine instead of many yards, and that tabloid feeding should provide all the sustenance necessary for feeling quite fit. Too hasty, Metchnikoff! Too rash, Distaso!

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“Now Professor Metchnikoff and all who are interested, tell me frankly: ‘Are not the great majority of cases of intestinal poison from bacilli due to indiscretions of diet and chronic constipation? Think again and start upon a new path of investigation: do not be carried away by interesting microscopical discoveries. There are, no doubt, a few cases of disease so far advanced as to be incurable excepting by the knife—cases of long-standing specific disease or actual deformity of the large intestine; but for Science’ sake do not allow that all people would be better without their large intestine.

“As to constipation itself—unless there is actual organic disease or deformity causing it—*every case can be cured comparatively easily by simple natural means.* I challenge you all that this state-

ment is correct, and is being proved daily by wise men. Intestinal stagnation usually spells chronic constipation, which favours the growth of bacteria, which poison the system. There are three great correctors and preventers of chronic constipation—the first is artificial, the second is natural, the third produces natural results. The first is medicinal (tonics, purgatives, or laxatives); the second is diet; the third is subliminal nerve-laxation treatment. The first is not recommended for repetition, the second is extremely efficacious in many cases; the third is quite as good as the second; but a combination of the second and third is the one which will have the most power—both temporarily and permanently.”

Now I wish to introduce a very interesting note regarding constipation, and one that has not yet been sounded by any other authority, and it is that this disorder is the result of nerve-tension in a very large percentage of cases. Careful observation and enquiry into the history of my own patients has elicited the truth of this theory beyond any questioning criticism whatever; but, above all, treatment by nerve-relaxation has confirmed my contention to the position of absolute indisputability. Patients or their friends cannot distinguish any nerve influence, nor will they always be easily persuaded that there is anything in the theory; yet method of cure, and cures effected, convince—at least afford no further *occasion* for questioning or doubt as to theory.

My method of obtaining subliminal nerve-laxation which permanently cures constipation is an extremely simple one. The patient lies down comfortably upon an ordinary couch, a friend

being present. I make use of one of the monoscopes of my own design, by means of which the patient very soon closes the eyes and falls into a semi-sleep. This lasts about twenty to thirty minutes, during which time I occupy some five minutes in securing nerve-laxation, or vaso-motor changes, as the case may be, without occasioning the slightest inconvenience or disturbance whatever. No treatment is easier for the patient, personal examination usually being quite unnecessary. Only one or two attendances are required—rarely three.

The only cases in which the treatment may not be successful are those in which actual obstruction from serious disease or deformity of the intestines is present, or occasionally when the patient is of weak intellect, or actually insane, or greatly debilitated from general disease, or habitually taking drugs which have the effect of constipating.

Certain other irregularities, usually associated with constipation, sometimes involving great pain periodically, which are an important factor in the causation of discomfort and restlessness in the female sex, are just as easily and readily curable under the subliminal nerve-laxation treatment, provided there is no actual deformity of the parts concerned.

Other Conditions

Sleep may be induced in fevers by reducing the temperature, either by drugs or by the application of cold—but this should only be done under the doctor's direction, however.

One of the best domestic sleeping expedients is a dose of opening medicine such as calomel, especially when the stomach or liver is out of order and constipation has also been associated. When the bladder is at fault only a medical man can distinguish the true nature of the disorder, and therefore he is the only one who should indicate the remedy.

In cases of diseased organs it may be fatal to administer strong sleeping drugs. Indeed, large doses will sometimes stop a fairly normal heart from acting, while a diseased heart will naturally have but a poor chance when depressants of any kind are given in order to induce rest. Therefore drugs must be administered which will benefit whatever disease is present and then better sleep may be expected. In sleeplessness of heart disease, it is often of great advantage to raise the head and shoulders, and in bad cases it is even necessary to provide a special sleeping chair with support in front for the arms to rest upon, when the patient cannot sleep in bed or reclining backwards in a chair: in this forward attitude the heart is brought into the most comfortable position for acting, while at the same time cerebral congestion is reduced to a minimum by gravity.

There is no condition more hopeless to treat by the sufferer, or by anyone else but a doctor, than neurasthenia, for unless it is first correctly recognised as such, and unless the disease is attacked at every root and branch, all sleeping draughts, narcotics, stimulants, or any other form of treatment will not only provide merely temporary alleviation, but they will soon lose their effect and

make the patient's general condition worse than ever in the end. The nervous system and blood being seriously out of order, it is necessary to bring these back to normal. The patient must have all symptoms studied and treated, and their significance noted as indicating original cause; the nerves must be treated by medicines, either in the form of tonics or mild depressants, according as symptoms may indicate either exhaustion or excitability. Even the eyes may require help from glasses for a time. Occupation is most important: patients seem inclined to drift into doing nothing but worry over themselves until they can take no interest in anything else. Massage, medicated baths, electricity are all good; while change of air and scene will afford new interests and create a happier and more hopeful perspective. This is the disease above all in which drug manias are produced amongst other intercurrent eventualities. The particular effects of various drugs will be dealt with in ensuing chapters.

Pains of all kinds must be treated on either simple and well-known lines, or specially according to their nature or origin. It is surprising sometimes how the domestic mind can devise means when needs must. A patient once sent for me to attend him for acute rheumatism in the feet, with swollen ankles, which prevented sleeping, the latter being his chief complaint. I could not reach him for some hours late at night, and he had resigned himself to waiting until the morning. Visiting him unexpectedly in the small hours I found him fast asleep with both feet pulled up towards the ceiling, having been slung in broad

bandages which were passed round a bed-curtain frame. This elevation caused less throbbing blood to the painful joints and enabled him to sleep. Ingenious means must thus be devised to meet desperate situations at times; but nowadays, medical men are so easy to obtain and so ready to attend that one is not likely to hear of many instances of this strange character. One powder of fifteen grains of Ac. Salicyl. Acet. made my patient comfortable very shortly, there being no further necessity for any suspensory measures.

Sexual excesses and perversions, and the drink habit, have no treatment that can equal hypnotic subliminal suggestion, to be explained in a later chapter. Certain drink cures depend chiefly for their efficacy—when there is any apparent—upon firm control and simple persuasion being exercised at the same time that some so-called medicinal specific is administered; but the effect is weak in comparison with that produced under hypnosis.

Further Principles

Sleeplessness, being caused so frequently by a subtle form of blood-poisoning, or toxæmia, may be cured by such treatments as render the blood healthier. This cannot be done by a purgative, or by a few bottles of medicine, or by anything whatsoever that acts as it were by magic. Toxæmia can only be permanently and satisfactorily cured very gradually, by dieting and administration of medicines according as a medical scientist is capable of discerning peculiar characteristics or idiosyncrasies of constitution in each patient, or by his discriminating particular

indications of disordered health, either as affecting certain internal organs, or as manifesting external signs and definitely interpretable symptoms. The blood can only safely be altered radically—as it should be when absolutely impure—by processes affecting the system as a whole slowly. Rapid measures may bring disaster. Rapid remedies for sleeplessness there are—which act by paralysing the brain and nervous system, and which therefore confer ulterior evils. A remedy to be satisfactory should be rational, and bestow lasting benefits throughout the whole system at the same time.

Turkish baths, medicated baths—even mud-baths—do good according as they are employed in conjunction with other treatments. But here, again, what will act beneficially in one case will not do so in another, and therefore such remedies must be judiciously selected and prescribed according as particular age, sex, constitution, or peculiar conditions indicate.

Massage is usually very good in many cases, for it promotes better circulation, and thus tends to produce a more healthy condition of the blood; but massage, though acting beneficially for a time and to some extent, is of little value alone and in the long run. I have known cases rendered more sleepless by baths and massage; but as a rule they will produce healthier activity of the skin, and even stimulate internal organs to somewhat better action by reason of improved circulation and change in distribution of the blood in those people who do not take enough exercise—people who motor too much and who lose the walking habit, never engaging in any form of sporting

exercise. But such treatments will only bring lasting benefits if kept up for a long time, and are not of much value when employed at rare intervals by themselves.

Hot baths are recommended by some advisers ; but they must be repeated if the tendency to sleeplessness continues, and they would therefore surely in the end prove weakening. Cold applications to the head are only a temporary resource of very doubtful efficacy.

A drug-taker requires treatment for the condition which has necessitated the ill-advised resort to drugs, as well as the particular evils created by the drugs themselves, before a normally healthy condition can possibly be restored : the victim must therefore undergo treatment for a double condition. There is no class of case that requires so much careful judgment and wisely devised plan of treatment as the confirmed drug-taker : the nervous system is usually transformed into one which is too weak and incompetent to afford sufficient self-denying will-power to the individual, while only too often the brain itself is so affected as to render the victim to some extent mentally defective ; therefore, everything being wrong, and deeply wrong, any treatment to be curative or lastingly beneficial must be very wisely conceived and very persistently applied by the patient, or for the patient, the functional and organic changes requiring occasional watchful observation in order that fresh readjustments may be effected as soon as ever indicated.

Many cases of insomnia are not easy to treat successfully when domestic surroundings are un-

satisfactory—whatever may be the precise or composite circumstances producing the latter. People may react upon one another; peculiar or irritable temperaments constantly do so; and such abnormalities may be inherited or acquired, having been produced by successive results of excessive or vicious tendencies, mental excitement or querulous sensitiveness having grown upon itself, afterwards being handed down to progeny.

Most illnesses make their victims irritable. There are the sweetest exceptions, of course: I have known instances of contented longsuffering and happiest resignation in the face of constant pain—not perhaps particularly acute, but certainly all the time present. Two people, both suffering, of course react upon one another. An invalid may necessitate so much attendance on the part of relatives or nurses as involves day and night duty, which may ultimately produce a measure of ill-feeling all round—not always in its antagonistic sense exactly. The whole atmosphere can thus become charged with the tension and stress of tetchiness, the patient brewing trouble in the very conditions which are most likely to foster and magnify it.

When a person suffering from insomnia is constantly in the company of another—whether the latter be ill or well to begin with—both are bound to suffer from the same affliction more or less. A sleepless husband will keep awake his anxious wife; and when restless nights beget dyspeptic and tired days, bad results are soon likely to be followed by even worse, affecting all concerned.

Hence it follows that a certain amount of isola-

tion and skilled attention is necessary when sleeplessness becomes severe, before relatives are themselves worn out, and to prevent the one case making others. There should be a conveniently working system of relief for nurse, wife, or other members of a family. But at the same time the patient should not be allowed to expect sleeplessness too eternally, and should not keep awake to prove it. Too much attention and watchfulness will itself serve to perpetuate insomnia. The last thing a patient should do is to make others keep awake. I have known whole households seriously inconvenienced and upset over long periods by one single case of insomnia, begotten of some form of illness, and itself begetting other forms, until at length a Weir-Mitchell treatment had been resolved upon and the further growth of mischief checked.

While a patient is undergoing treatment there should be no domestic interferences with measures recommended, or the favourable results will be all the longer to wait for. Even if nurses are plentiful and good, there may be interferences on the part of relatives—who mean well in thinking they know what is best—which will render the whole household a restless one. In cases where the patient is getting no better and the general conditions do not appear satisfactory, the best plan to adopt is for the chief sufferer to leave home for a time, and either go to an institution suitable to the case—medical or convalescent home—or to reside with a medical man who makes a special study of such cases, until he has got completely well or has again acquired the power of sleeping naturally and without drugs.

CHAPTER V

DRUG-TAKING

IN order to procure sleep drugs may be given, either directly, in the form of hypnotics, narcotics, or analgesics (pain alleviators), when they act by influencing the sensory, motor, and metabolic functions of the nervous system, or indirectly in order to cure the diseases upon which sleeplessness depends and of which it is a symptom. Or yet again, some may be given directly and others indirectly in the same person ; and in very many instances this is both the most sensible, expediently humane, and permanently beneficial plan to adopt, for, by so doing, immediate pain and suffering may be alleviated or annihilated while the disease is gradually cured, the end being that no drugs at all will be required. But should narcotics and certain analgesics be given alone, while the disease is either unrecognised, misunderstood, or disregarded, then there is a very great prospect of the patient having to continue the narcotics for a long period and probably for the whole time of life.

It follows that, as a rule, narcotics are very dangerous to take for sleeplessness, the more especially by those who do not understand their own disordered constitutional condition, members

of the general public who cannot know what scientific medical men have deeply studied. We have seen in the foregoing chapters that with few exceptions sleeplessness is a symptom of bodily disorder or disease, which should itself be treated properly. But in any case, even if only temporary and due to periodical over-strain, most hypnotic and narcotic drugs are then dangerous to use, notwithstanding. And they are so because of the deleterious effects they produce, almost without exception, having in nature and effect these two very important characteristics, they lose their power when given in the same dose, requiring gradual increase, but much worse than this, they create a gradual and growing weakening of the will and moral sense. Paralyzing by degrees the powers of resistance, they cause their own necessity for more. They ultimately compel their victims to be false to themselves and hopelessly false to others; once the repetition has got even a very small hold upon them, nothing else but again and again to more and more will pacify. They create a particular form of nervous debility which is akin to and which in many ways closely simulates hysteria: but there is this great distinction, that while in hysteria proper the patient imagines so much, the drug-taker tends to fabricate much more than he imagines.

Narcotic drugs, such as opium, morphine, chloral, cocaine, and many others with which the reader will be less familiar, are so devilishly satisfying that the victim of repetition grows slavishly content that the disease of which pain

or sleeplessness is a symptom may no longer be studied with a view to its being conquered. The coveter of such drugs is placed in a hideous bondage which makes him no longer a reasonable habitant of this world ; he may be able to display great gifts under the influence of a usual dose, but normal balance and steadfast self-reliance are gone for ever, unless by superhuman wrench or great outside aid and persuasion he can be induced to discontinue ; simple abnegation, however, is practically unknown ; only by the methods and help and firm guidance of the medical psychotherapist can the victim be saved from further wreckage.

Many medical men, unfortunately, have much to answer for, in that they have freely administered narcotics when they should have studied the disease more shrewdly and deeply, of which pain and sleeplessness have been merely symptoms. Indiscriminate writing of prescriptions, which nowadays can only too well be read by the laity, has resulted in much wreckage of humanity. Even if a prescription have been lost, the fact that morphine or chloral was in it is remembered, and the chemist is asked for, and is easily able to give, something containing one or other of these ; home drugging by tablets has also become so common a custom that there are millions to-day doctoring themselves for diseases they know absurdly little about by potent remedies of which they understand even less. Pocket tablet cases and home cabinets are quite common possessions of well-meaning but sadly misguided mothers and housekeepers ; phenacetin, aspirin, veronal are familiar sugges-

tions to neuralgia-neurotics suffering from late nights, being ready remedies to a host of desperate living indulgents, male and female.

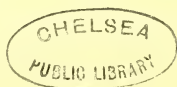
Under the heading "Speech Fright" I have recently pronounced an opinion in the columns of the *British Medical Journal* upon the freedom with which opium and morphia have been recommended by some medical men, for individuals who have wished to assert themselves as men of importance with some particular mission in the world—even if only the harmless and amusing one of entertaining their friends by an after-dinner speech—and who have been liable to fail at the psychological moment and to break down. As this contribution contains a warning which may well have a wider and more comprehensive application, and will serve to indicate my own already published contentions and theories regarding the administration of narcotics, I may as well quote it in full :—

SPEECH FRIGHT

To the Editor of the "British Medical Journal"

SIR,

The discussion taking place concerning the causation and cure of "Speech Fright" in the columns of the *British Medical Journal*, which has gained the attention of the general public through the *Daily Mail*, will result in incalculable evil and widespread injury being done if the remedy suggested by more than one medical correspondent, namely, the taking of opium, is seriously entertained by the average medical or lay reader, and if the advice given is not promptly met with an earnest warning that such a remedy freely recom-



mended would surely bring consequences that would prove a thousand times worse to humanity at large than any amount of ill-delivered, and badly-prepared, but comparatively harmless after-dinner speeches that might be delivered in course of time.

The medical practitioner who is experienced and clear-minded enough knows well that to advocate opium, morphine, cocaine, and such-like drugs is to create and spread a craving more dangerous than that so commonly observed for alcohol. Cases which come before him prove indisputably that once the assuaging and exalting effect of opium is perceived by the patient there is every likelihood of a desire for more being created, which is frequently so strong that a hopeless and degenerate future is unavoidable. The drugs named give temporary relief or stimulation, but they are equally certain to render the subject weaker to resist further increased desire for more. Taking once gently persuades the speaker to take usually, which again invites him further to take just every time he wants it—which, of course, he soon finds is very frequently. Better that there should never be another after-dinner speech delivered than that in future the excellence thereof should depend chiefly upon necessarily increasing dosage of evil-bringing medicaments. Once the opium idea gained firm root amongst the masses, the extent to which it would be carried out would soon be quite appalling. The habit might even find its way into the pulpits, and, perhaps, be advocated there. Think, also, of an opium-stimulated Cabinet Ministry! For if temporarily effective for one, so also good for any and all.

I am myself a public speaker and a medical practitioner, and I would suffer the misery of a hundred dry mouths and repeated hours of speech-suffering before I took a single opium pill.

“MOST DRUG-MANIACS TRACE THEIR MISERY TO MEDICAL PRESCRIPTIONS ; I WOULD GO SO FAR AS TO RECOMMEND THAT CERTAIN DRUGS SHOULD NEVER BE ADMINISTERED THROUGH WRITTEN PRESCRIPTIONS, BUT ONLY HANDED OVER TO THE PATIENT BY THE DOCTOR WITH INSTRUCTIONS FOR TAKING, THE PATIENT NOT EVEN KNOWING THE NAME OF THE REMEDY. . . .”

Speech or stage fright is a simple neurotic symptom—usually a sudden irruption of a sense of incompetency—a manifestation of mental, nervous, or physical incapacity. It is said to be on the increase, as, indeed, are all neurotic disorders. In some cases merely the general health is a little below par, at other times the digestion is particularly at fault ; here and there we find a family history of either mental or nervous conditions of various kinds, and very often in others the heart is primarily or secondarily affected. The cure for such should not be a difficult matter—and a safe one when a truly scientific one—but necessarily a slower one than the taking of a dose of opium ; yet a more lasting one, constituted of medicinal and dietetic measures, acting directly and indirectly, while, of course, habits, exercise, etc., should be properly regulated. But, in addition, experience has shown that hypnotic suggestion has a most powerful and rapidly curative influence, promptly correcting, as it will, obsessions of incapacity or ideas of recurring failure, helping a halting, nervous temperament, and even further enabling general treatment to be adopted pleasantly, thoroughly, and much more efficaciously. Dr. Woods has recently referred to twenty-eight cases of “speech fright” in the *British Medical Journal*, treated merely by hypnotism alone, out of which twenty-three gave satisfactory results and five were improved.

Speakers should not forget, however, that one

of the most important factors making for easy, comfortable, and self-possessed powers for public speaking is, after all, a thorough grip of the subject. Many good speakers on favourite subjects fail occasionally through over-confidence in thinking they are sure to speak well upon almost any other subject. Moreover, it must be borne in mind that a difficult subject will sometimes cause a week of worry and anxiety before the speech is made, which will gradually upset the digestion, interfere with sleep, and unsteady the nervous system, to the end that some sort of speech failure or breakdown distresses both the speaker and the audience.

“ . . . I SEE SO MUCH HUMAN WRECKAGE CAUSED BY OPIUM, MORPHINE, AND COCAINE THAT I AM SIMPLY AMAZED AT THE FREE ADVOCACY OF SUCH A DANGEROUS REMEDY AS OPIUM BY MEDICAL CORRESPONDENTS IN THE *British Medical Journal*. I CONSIDER THAT DOCTORS NOW THOROUGHLY DESERVE THE BLAME THEY ARE GETTING FROM CLEAR-HEADED CRITICS FOR ACTUALLY CREATING DRUG-MANIACS. IT IS ELOQUENT THAT SOME OF THE WORST CASES AMONG MY PATIENTS HAVE BEEN MEDICAL MEN.”

I am, etc.

Even though a prescription for a small amount of, say, veronal may be given by a doctor to a patient, the latter may buy this quantity at six chemists' shops and take the lot in one dose: actual instances have come before my notice of this being done habitually.

I again take this opportunity of recommending that a rigorous legislation should prevent anyone, including medical men, from prescribing such drugs as morphia, cocaine, chloral, chlorodyne,

so that a patient may use the prescription without any further advice to the end of his days, and even enlarge the quantity taken. Such drugs should only be handed over to the patient by a medical attendant. Nor should anyone suffering from any complaint whatsoever take a drug or mixture originally prescribed for someone else, for the reason already given, that no two people are really alike. Only the very simplest home remedies should be experimented with, if a patient be so minded. And if consultants would not wish to dispense, then it should be made incumbent upon them to direct local medical attendants to deal out the drug exactly as directed, and only for a definite period as the consultant should recommend. There are many remedies good for the time, but bringing other evils if taken too long. This plan would soon reduce the number of drug-maniacs to a minimum, and save a multitude of humanity from future wreckage, despair, and misery.

In a clinical lecture on sleeplessness delivered at the Medical Graduates' College and Polyclinic on January 17, 1900, Sir William Broadbent delivered himself of the following :—

“One effect all drugs have, and always have—they diminish the resistance and impair the manhood of the individual. It is not only that he has experienced relief and that he longs for it again, but he will not endure with patience and fortitude a privation of sleep which he would formerly have thought unimportant. So it goes on until the morphia habit is established or the patient becomes a slave to chloral or sulphonal or trional. Nothing is easier than to obtain a cheap kind of

credit by prescribing a sedative, especially if its name is new to the patient and he can be assured that he is not taking an opiate properly speaking ; but it may be the first step in the downward course towards suffering, bodily and mental, of the most terrible kind. From what I have seen I should prefer to be a victim to morphia or to opium rather than to chloral or sulphonal or trional. If the reaction from the opium intoxication is painful, there is, at any rate, a positive pleasurable exaltation, whereas the best that chloral and sulphonal can give is oblivion, and there is not only depression but a pitiable loss of volition. The wretched subject cannot make up his mind on the most trivial question, and when he has come to a decision he regrets it immediately. Besides this indecision there is loss of memory, and either from this loss of memory or from impairment of the moral sense no dependence is to be placed on his statements. The heart and the vessels lose their tone, the circulation becomes languid, and the tissues grow soft and flabby, till finally the victim is incapable alike of effort and enjoyment. Unfortunately these drugs are placed within the reach of all in the form of syrups and tabloids ; there is no restriction on their sale, and they are constantly taken on the advice of chemists or friends. The medical man who prescribes any of them has then no further control over their administration, and incurs therefore a terrible responsibility."

Such is the pronouncement of one of the first physicians of all time, made to men who were commencing medical practice, as conviction not only deeply and scientifically arrived at, but earnestly and anxiously delivered, deserving the fullest comprehension of all thinking people.

It is often very difficult to say whether a drug

is doing harm or not, and it requires much time and observation of effects in a large number of cases to decide. I think it may fairly and safely be taken as a rule that the more effectual a drug is in inducing sleep the more harm is it likely to produce if the dose be repeated or gradually increased over a long period of time. It is not difficult to realise how this should be so when one carefully studies the various causes of sleeplessness. It should never be concluded that because the immediate after effects are trifling the taking of a particular drug is harmless, for the worst disadvantages may show themselves later on.

Let it be clearly grasped that I only countenance drug administration for the purpose of helping sleep in such cases as are either incurable from disease, or in such sufferers as may be humanely assisted during an acute stage of disease, after the complete cure of which natural sleep should return. If the free and reckless recommendation of drugs by consultants, and those who write prescriptions, merely brought sleep, and no disadvantage, one would not criticise so severely; but that the symptom sleeplessness only should be attended to, while the disease causing it is disregarded, is to my mind a practice deserving emphatic condemnation. I repeat that the *causa causans* should be sought for, and be properly treated, so that a state of the brain is restored which will be favourable to the restoration of natural sleep. I feel it incumbent upon me, at this stage, to refer to various commonly known drugs, pointing out their limited uses, but also specially drawing attention to their disadvantages and dangers.

CHAPTER VI

DRUGS

BROMIDES

BEGINNING with probably the most extensively used and mildest of hypnotics, the bromides of potassium, sodium, and ammonium are recommended extensively by the medical profession as drugs which calm the nervous system, thereby helping in securing sleep, especially when a person has had worry or temporary mental excitement. They do not appear to do much harm excepting after being taken for long periods; they then dull the intellect somewhat and produce defective memory. Taking them altogether, they are nothing like so harmful as other drugs commonly used. They are decidedly depressant in their action, reflex excitability being diminished and the activity of the nervous centres of the brain and spinal cord being reduced. They are very valuable remedies for epileptic fits, convulsions of childhood, and hysteria; the heart and lungs being weakened by them, such conditions as excitable heart may undoubtedly be benefited by small doses.

When taken for long, or in large doses, bromides may also produce a very unpleasant eruption on the skin; some people are very susceptible to

their influence, and will develop such disagreeable effects under even small doses.

There is no doubt whatever that in the hands of wise medical men bromides are amongst our most valuable medicines ; it is only when taken by people who do not understand their own condition, and for long periods in large doses, that the disadvantages are observed. As a domestic remedy they are probably the safest and the most excusable to make use of, but the earnest enquirer reading this brochure may just as well know both sides of the question, even when mild remedies are referred to. Yet in time their effect diminishes, and stronger drugs are looked for. Bromides really only influence symptoms of a condition which, if chronic, should require a proper treatment itself.

SULPHONAL

This has been found to be of much value as a hypnotic, and has consequently attained considerable popularity—so much so that not a few deaths have been caused by it. No ill-effects are supposed to follow its use, according to certain medical and many lay ideas. But while it is true that the immediate ill-effects are hardly appreciable—hence the popularity—yet it is now well known by the wiser that the ultimate effects of repeated dosage are likely to be disastrous. It is therefore recommended to be taken at intervals, especially as its effects are somewhat cumulative—that is to say, they may be perceived some time after the drug has been taken, especially if constipation has been present. It will take an hour or two to act after being taken, and may even

give better results the second night than the first. It does not appear to be particularly depressant in action, although a drowsy state during the day-time, after sulphonal has been taken at night, may be considered an apology for this influence. As regards its ultimate effects after repeated usage, I could not attempt to improve upon the eloquence of Sir William Broadbent's lecture quoted previously.

Deaths from taking sulphonal—as from taking other narcotic drugs—are the result of over-dosing, either in amount of the drug, or in even a smaller amount being too large for a specially diseased condition of the heart. But occasionally some special idiosyncrasy is present in the individual rendering him more likely to be influenced to a more dangerous extent than the average person.

TRIONAL, TETRONAL, VERONAL, ETC.

Trional is only distinguished in chemical constitution from sulphonal as dimethyl-methane-diethyl sulphone is from methyl-ethyl-methane-diethyl sulphone—for such are the complicated chemical names of these hypnotics respectively—the former closely resembling the latter in action but being rather more rapid in effect. The former is more soluble, and therefore does not carry its effects into the next day or night so much, while the latter has generally been found to be safer.

Tetronal, veronal, hedonal, and medinal have much the same chemical constitution as trional, nevertheless they are said to be followed by less ill-effects. I have no doubt, however, that the more distant effects are much the same in all

when taken frequently over long periods: they will enslave the victim in a thralldom of hopeless self-weakness, and blunt and pervert the moral senses. They are as yet comparatively new, inasmuch as observation of their much remoter effects has not yet been made. They indicate a sad struggle of commercialism to find the perfect hypnotic, and the next and newest is best merely for the time being, being temporarily assuaging only to be insidiously and hideously demoralising in course of time.

When such drugs are taken in tablet form there is great danger from their not quickly dissolving, for dose upon dose may dissolve at the same time—later on when all previously swallowed had seemed a failure.

CHLORAL

This is a well-known and many-years-adopted remedy. It is made from ethylic alcohol and chlorine gas. Usually found nasty tasting, it is a powerful hypnotic, but it also acts as a depressant. I am of opinion that in certain acute cases of disease, in which it is employed as a hypnotic, death takes place largely on account of its depressant effect. In tetanus, for example, which is a very fatal disease, large doses of chloral are given, while the disease itself is of a most exhausting nature, the very products of fatigue alone acting as powerful poisons to the system: yet many medical men will argue that the whole collection of signs and symptoms leaves but a poor choice of evils, and that chloral or some such depressant drug *must* be given, and that alone. I have myself recently attended a

case of tetanus, in which the treatment I adopted proved successful. I administered one of the most powerful tonics and antitoxins known at the same time that I gave depressants. But even this plan must be wisely carried out with due regard to dosage, method of administration, suitable food, etc. And from this case I cannot ask the reader to consider there will be no harm from depressant hypnotics provided stimulants be taken. I merely wish to point out how depressants are sometimes recommended for good, regardless of attendant evils.

Now let the reader take this lesson, therefore, that in taking such drugs as these, while good may be done on the one hand—the inducement of sleep—harm is bound to be done on the other; frequent repetition and necessary enlargement of the dose creates accumulated evils and makes the later stages worse than the first. This book will not have been written in vain if it serve to warn some of its readers of the dangers of taking certain drugs that afford temporary relief—to assuage suffering or correct disability that wise guidance would treat in quite another way that would bring future benefit and permanent advantage. Drugs that “let in defilement,” that taste nice at the time but work destruction for the future, are compounds of the Devil, if an ignorant public could but be made to realise it—at least when they are taken beyond the extent to which a careful and wise medical adviser would direct.

Chloral is dangerous to take in cases of heart or kidney disease. The depression created chiefly affects the brain and spinal cord. Nor should

old people and those suffering from exhausting acute disease take it. The continued resort to it, by even the young, however, is bound to be followed by chronic and even permanent weakness throughout the whole system—nervous, muscular, vascular, and respiratory.

In manias of various kinds it is of course of value, as these conditions are characterised by superabundance of energy and hyperstimulation, with high-tension pulse, as a rule. In delirium tremens it is of considerable value; but these conditions of course require other treatment as well.

Just as in the case of most hypnotic drugs, great efforts have been made to obtain chloral derivatives having beneficial effects without disadvantageous ones; thus butyl-chloral and chloralamid have been introduced. The first may be described, very simply, as having less power as a hypnotic than chloral, and therefore having less deleterious effect. It has been found to benefit particularly neuralgia of the fifth nerve. Chloralamid is also less toxic, but also less powerful as a hypnotic. Chloralose, on the other hand, is more powerful than either chloral or chloralamid: it is to some extent stimulating to the spinal cord, while it leaves the heart comparatively uninfluenced; but, as though everything must have *some* disadvantage, in cases of high arterial tension and kidney disease it must not be used, as it makes matters worse; and it has been even credited with having anti-hypnotic effects in some cases.

PARALDEHYDE

This is becoming a fairly well-known hypnotic, and in some respects justly so. It is a pungent evil-smelling liquid that even creates a characteristic and offensive odour of the breath—which is just as well, for those who have become addicted to it usually reveal themselves as drug-takers, and thus incur the possibility of their being further sensibly advised in regard to it. It is undoubtedly a safer drug to use than those named previously, excepting the bromides. It has no effect upon either the breathing or circulation, but it will sometimes upset the digestion, even when diluted largely. It is one of the most nauseous and otherwise objectionable of all hypnotics to take.

Remarks by the Way

All the hypnotics named, according to their power, the frequency with which they are taken, and the length of time the habit has existed, have the effect of injuring the nervous constitution, weakening the will-power and emotional control. Those addicted to them develop a tendency to magnify their trouble or distress, so that more and more is wanted, either of the same thing or of something similarly acting—temporarily alleviating, but permanently damaging. Professor Clifford Allbutt has demonstrated that under their influence “judgment becomes uncertain, action capricious, and temper fretful. The muscular system also, in its enfeeblement, weariness, and tremor, shows a like undoing.” In advanced cases mild mental derangement is not uncommonly seen; and in all

cases in which the will-power is enfeebled and the moral sense blunted the victim's word can never be fully relied upon. It appears to be a rule amongst those addicted to habitual use of hypnotics that not only will their power for truthful representation gradually depart, but they will even display little evidence of shame or seriousness when their falsehood is clearly demonstrated to them. Many of them are very clever at concealing their weaknesses, however, and will go some very roundabout distances in order to put an enquiring and circumspecting friend off the scent. I have known drug-takers speak most strongly and eloquently against the habit, in case anyone might suspect them, and sometimes in order to extract what might be thought, by others, of such remedies. I have read a clever article written against morphine-taking by one who was himself addicted. He thought his habit was so absolutely secret that he was safe from all possible suspicion. This article led to discovery, however.

OPIUM AND MORPHINE

These are not really entitled to be termed hypnotics, as are those drugs already referred to, but they are so commonly used by those who sleep badly that they deserve some attention. They are used for sleeplessness which depends upon pain or distress, and in this respect they have their advantages. But so great are the disadvantages that I most emphatically denounce them as being amongst the most dangerous drugs it is possible for anyone to take, excepting strictly and wisely according to doctor's orders by those

who can be reasonably controlled. But practically nobody can ever be sure of themselves with a dose of morphine circulating; not even the cleverest, brainiest, or in usual respects the most level-headed man can be certain what he will do in the future once he takes *one* dose. For pain or distress may come again, and again morphine will be looked for, and again. Every dose weakens every person who takes it in powers of resistance. This is not to argue that nobody ever does resist morphine; many do who find themselves strong enough. Therefore my proposition in the *British Medical Journal* already referred to, designed to protect sufferers, is one that, while it may appear severe, is not at all so once the real danger of drug-taking is apparent.

When referring to morphine, I intend the reader to make much the same observations apply to opium, from which it is a derived alkaloid. The action of opium depends chiefly on morphine. The latter is now more commonly used than the former, because it is convenient in many ways. Morphine acts much more quickly than opium, which is less soluble. Its method of administration by injection makes it preferable also, so that its sedative influence may be obtained without immediate prejudicial effect upon the intestinal tract. Opium is, however, better than morphine for use in intestinal troubles such as diarrhœa, obstruction, or inflammation of the bowels. Morphine causes less constipation than opium.

By the lower classes, who are not so well able to get possession of hypodermic syringes, and who have not a very wide acquaintance with

drugs, the tincture of opium commonly called laudanum is commonly used as a stimulant, pain killer, and hypnotic; and next in popularity will be found the opium pill. Chlorodyne is also a common remedy easily purchasable, containing morphine and other ingredients which alleviate pain and distress, especially of the stomach and intestines.

It should ever be borne in mind that aged people, as also the very young, may be dangerously susceptible to opium and morphine and preparations containing them: again, they act differently in certain individuals, some being excited, others calmed and soothed. Pain hinders the action of morphine, the dose of which may in consequence require to be increased from what would be quite effectual with no pain present. When the heart, kidneys, or lungs are diseased opium and morphia must be taken with very considerable caution, for in such conditions a comparatively small dose may cause death. For hypodermic use atropine is a favourite addition to morphia, rendering the latter less objectionable in its action, causing less constipation or indigestion: especially is atropine of advantage when morphine is given for the purpose of inducing sleep.

Opium is commonly used in the East by being smoked in pipes, the sublimated products being inhaled.

It is all the more necessary for the reader to study all sides of the question of drug-taking, for there is an idea prevalent—especially amongst the takers themselves, and so freely advocated by

them when safe and favourable occasion offers—that is to say, when impressionable and unbiassed ears can be reached—that opium and morphine are wholly beneficial and quite harmless—and even necessary. This notion the more readily finds converts inasmuch as people of distinction and sometimes eminence have been known to be addicted. What De Quincey did, why should not others?

I am aware of attempts being occasionally made to establish an excuse for opium or morphine taking under the special plea that their evil effects are exaggerated. Especially has this excuse been advanced by those who advocate opium-smoking, and who desire to convince one that evil results can hardly obtain on account of the small amount of the alkaloid taken. But I can never shake off my tendency to be suspicious in these matters that the most specious and telling arguments are advanced by those who themselves are addicted. For if larger doses have evil effects, then smaller will contribute the same in smaller amount; but as smaller persuade to larger, I contend the potentiality is there, and the evil is there, all the same. Therefore why argue that there is no harm—unless you take it yourself? It may be supposed I am of the nature of a faddist, and that I adjure the reader to eschew all stimulants and drugs that are seductive. So I do if a person have not sufficient strength of character to limit amount; but while such as morphia, opium, chloral, etc. actually themselves create a weakness of will-power, so invariably—ininitely more certainly than familiar alcoholic drinks—I class them as always dangerous

for self-administration: the taking of alcoholic drinks is much more easily limited and does not enslave and demoralise the suffering individual so permanently and irrecoverably. The reader might argue that, according to my own contentions, I myself am probably an abstainer from narcotic drugs but an indulgent in alcoholic drinks, because I do not thoroughly denounce the latter: I am not a total abstainer from alcoholic drinks, but I never take them excepting either as medicines or as very occasional and agreeable adjuvants to happy social intercourse. I am a believer in a little wine "for the stomach's sake," for such as are quite content to feel themselves better for it. Who has a right to interfere with those who complain of nothing and only want to be left to do as they please? I am only too glad to find that my health and temperament are such, as a rule, that I very rarely either require or desire alcoholic stimulants. I am usually quite well enough without them, and happy to think of myself as having powers above those who are so weak mentally or physically that they cannot live without. I am out of the ordinary ruck and restraint of professional routine in writing this booklet, endeavouring to give advice to others as to how they shall govern themselves, and I therefore have it borne in upon me that the first essential for such an one is to be able to govern himself and to express himself in a position to practise and personally demonstrate just what he preaches.

The first effect of opium or morphine is one of excitement or exaltation, the victim perceiving a sense of happiness and pleasure about every-

thing. There is also an increase in the intellectual power and a stimulation given to the imagination, which combine to introduce a feeling of ecstasy. Naturally such effects will carry with them a persuasion to perversion, and a distortion of vision, conception, and action. But after this stage comes one of correspondingly intense depression, in which the subject becomes drowsy and may sleep.

There can be no question as to the great value of opium and morphine, when used legitimately as the physician directs, in cases already referred to ; as an intestinal sedative in some of the most serious disorders they cannot be beaten by any of the newer remedies. I want the reader to observe the endeavour on my part to be as fair in criticism and discussion as it is possible to be in this treatise, for no good would be accomplished by any attempt being made to employ excessive or exaggerated representation in any argument. It is true that extremes help us to find the happy medium, as object lessons, in the comprehension of some, while lurid pictures are necessary for others ; but I hope I am addressing the average reader, however, who knows well how to study exceptions which prove rules, and how to interpret reasoning which deals with all aspects. Some distinguished writers even denounce alcohol as a poison in order to make converts to faddism : I happen to be of the opinion that the plain truth is even of greater value.

Opium or morphine taking ultimately produce a characteristic cachexia, which has been well described by an observant author as "an emaciation, a leaden pallor, and a languor accompanied

by neglect of person and of the ordinary duties of life."

The taking of morphine seems to have become more extensive and widespread as the exploitation of tablet forms of drugs and hypodermic syringes has afforded information and presented the ready means of indulging. The whole thing is now understood to be "such a very simple matter." Again, the neurotic era in which we are now living is doubtless making both simple and desperate measures more urgently necessary every day. Everything is going faster and keener; the keener the faster. Walking was good enough one day; the railway train soon after: now there is a motor-rushing urgency displayed by the majority; indeed, improved aeroplaning will soon also evolve into "such a very simple matter." Some constitutions can bear up firmly and keep a steady head, notwithstanding the whirl of modern existence and the dizziness entailed in keeping up with it; others feel the strain deeply, and repeatedly show signs of giving way, now resorting to this remedy, then finding out some fresh stimulating food or drink which may bring further evils of their own. Such a rate of living lands the unfit to the lower level of "taking something for it" repeatedly, and it must ultimately be regularly, until, having stepped into the still baser plane of diminished self-control, they drift incontinently to a lower still, always to further misery and anguish, out of joint with normal life, hating, hated, ultimately spurning and scorning self, it may be into an asylum or the grave—after perhaps self-mutilation.

BUT THOSE AFFLICTED NEED NOT DESPAIR ; THE WORST CASES ARE CURABLE UNDER THE MOST ADVANCED SCIENTIFIC TREATMENT. THERE EXIST MORE THAN ONE INSTITUTION FOR DRUG-TAKERS, WHERE A CURE MAY BE EFFECTED. IN THE BLACKEST DESPONDENCY SUFFERERS SHOULD ALWAYS FEEL THAT THEY ARE NOT HOPELESS SO LONG AS THEY WILL CONTINUE TO WISH FOR A CURE. THEY CAN BE CURED.

In only one class of case is the repeated administration of morphine justifiable over a long period, namely in the incurable, when a considerable amount of pain must of necessity be suffered before the end comes ; it would be quite wrong on the part of any medical practitioner to withhold any drug that might bring even the smallest amount of comfort to a patient under these circumstances.

Some people develop the morphine habit—or it may be cocaine or other drug habits—after being recommended the remedy for attacks of asthma. I have known of instances in which morphine has been taken first during the attack, then again on anticipating an attack after observing premonitory indications, the patient afterwards, finding previous doses had been so comforting and soothing, taking a dose at any time that fancy or perhaps some premonition of distress suggested it. I have even heard of instances of bringing on attacks purposely in order to make an excuse for morphine ; but verification of such design is, of course, difficult in these cases.

Morphine is sometimes taken on the recom-

mendation that it will stimulate the intelligence and general capabilities when a person has some particular ordeal to pass through, as in the instances referred to under "Speech Fright." Thus students have sometimes been advised to take it before examination, while even Members of Parliament are said to have sometimes resorted to it in order to obtain a sense of confidence and a clearness of thought which will enable them to make a brilliant appearance. I ask the reader to accept this with respectful reservation, however, as I have no proof that this has been the case. Singers also, and actors will occasionally try the same means.

Remarks by the Way

It is just as well for those who have never allowed themselves to drift into the eternal bondage of drug-taking, for the purpose of assuaging distress and procuring sleep, as it is for the victims themselves, to understand that amongst the disadvantages of the morphine and other drug habits is the degenerate faculty for telling falsehoods that develops. Generally speaking, no narcotic drug-taker's word should ever be relied upon. It will perhaps help those victims into whose hands this book may fall to realise this fact, once for all, that their word is usually quite unreliable, and that they appear as though they scarcely realised any longer exactly what the truth was. The morphine-taker ultimately feels such repeated gratification that he becomes impatient before argument, and looks upon concealment, misrepresentation, or

falsehood as virtues, because benefiting him and his kind alone, not understood by others, something entirely within the secret of self, and therefore warranting any kind of defence. Professor Allbutt advises those who have any dealings with morphino-maniacs—for such is the designation they receive by medical men—never to ask one of them a question expecting a truthful reply. Yet even when victims are aware of this failing, such is their moral obliquity, they will not be particularly pained when challenged with it. They are satisfied with themselves and their so-far secret remedy.

There are some authorities who argue that morphino-maniacs live a length of time equal to an average healthy life-time ; but who shall decide how long any indulgent might have lived otherwise? Everything plainly suggests the contrary, however, and a superficial study of the effects of drugs will soon convince the reader that anything having a repeatedly depressant action upon most organs of the body, as well as the nervous system, must tend to shorten the span of existence. Who shall decide that a victim who dies at sixty would not have lived without morphia until seventy? But, again, perhaps he might not have lived so long without morphia, especially if the latter had been taken on account of the pain of disease. The chances are, however, that he would have lived a happier, longer life if medically treated properly for the painful condition. It is quite certain, in any case, that victims develop a most unhealthy appearance, becoming sallow and prematurely old in countenance, and if they have lived a certain

number of years under drugs, theirs has been but a "hell of an existence" in comparison with that of the healthy. They have laid themselves down to rest in sardonic smiling hallucination only to rise alternately in grim realisation of the hateful deception and hideous artificiality of it all: they have repeatedly elevated themselves under a dose for the time being only to become slowly and painfully conscious again and again of an inexorable and ever-recurring phase of repression, depression, and oppression.

PHENACETIN AND ANTIPYRIN

Phenacetin, and phenazone or antipyrin, are also taken extensively for sleeplessness, especially that painful form due to neuralgia, sciatica, or headaches, until the habit of taking them is not uncommonly formed. They are also used for reducing temperature, and on this account have acquired an extended application. Being comparatively safe in small quantities, and so freely recommended and dispensed by chemists, they are not infrequently taken in large, reckless doses, which even occasionally cause death.

CHLOROFORM

Inhalation of chloroform is happily somewhat rarely resorted to. This product is neither so easily procured nor quite so safe to take. Many deaths have occurred through self-administration. Considering that even in the hands of experienced medical men, administering it with the greatest knowledge and care, death will occasionally take place, the ignorant and clumsy use of chloroform

by a patient herself, who knows little about its powers and effects, is always fraught with the greatest risk. Many a time have the foolish and ill-advised placed a saturated towel over their faces, relieved and contented, but never to rise again—a sickly and sorrowful subject for a coroner's inquisition.

CHAPTER VII

TREATMENT OF THE DRUG HABIT

IT should scarcely come within the scope of this treatise to deal at length with the question of treatment of the evil effects of habitual drugging with narcotics. All that need be mentioned for the present purpose is this : that the habit must be conquered (*a*) by certain other drugs being given for a time which will act as substitutes to some extent, but which are not so deleterious either in their immediate or further effects ; (*b*) by the disease or disorder being properly treated, of which the sleeplessness is merely a symptom, rendering the necessity for taking hypnotics unnecessary ; (*c*) by an exercise of whatever amount of will-power remains, so that this shall be increased and strengthened. In not a few instances it is necessary for the victim to be placed in some medical home where particular treatment is given, especially when a sufferer is unable to receive other help. Relatives or friends have usually little influence, and the victim's perverted practices and excuses ultimately wear them down, leaving him or her all the more troublesome and hopeless. The falsehood and deception that may be practised in a bad case will exhaust the patience and perseverance of even many family medical attendants: thus

a number of cases are simply abandoned by all to their worst cravings until an asylum gives relief to relatives and friends.

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Some—but very, very few—are capable of realising the plight into which they have drifted, and of wishing to do anything to recover their lost powers of control ; others pretend to regret their weakness, but show no genuine disposition to do all in their power to help themselves. The dread of a discontinuance of morphine is quite characteristic of its victims, and occasionally one sees most distressing apprehension on the part of those who for some reason or other anticipate a possibility of not being able to get a supply.

I am not in favour of immediately cutting off morphine or any of the evil-producing hypnotics—at any rate in cases in which the habit has been acquired on account of the pain or distress of disease. I am firmly of opinion that the disease should be cured or at least alleviated first, and then the hypnotic should be taken away when there was less occasion and excuse for it.

It is instructive to observe what happens if a drug be taken away from a patient who has been accustomed to taking it. If the withdrawal be

sudden a dangerous collapse may set in ; if rapidly but still gradually withdrawn, especially in the case of morphine, any distresses that have been felt which have originally been relieved by doses of the drug are now felt much magnified, and a miserable trembling excitement comes over the patient, the whole condition forbidding anything approaching as much calmness as will permit sleep. Indications of extreme distress suggest the extreme unwisdom of cutting off too rapidly, unless very thorough steps be taken to minimise effects by general measures, and by drugs which counteract, being directed against each set of symptoms. It should be realised that the agony of sudden withdrawal of hypnotic drugs is often so intense that a sufferer will sometimes be driven to committing suicide. I recollect a case of a medical man, returning to England from the tropics on board a liner, who had contracted malarial fever some years previous, and had taken morphine regularly ever since. He was so ashamed of his habit that when he called me in to see him he merely gave his symptoms, which I treated in the usual way, administering such remedies as I knew so well the effect of. Not obtaining the result I expected I questioned him further, and found he had been taking prodigious quantities of morphine and had run out of his supply. The whole aspect of the situation was so distressing to him when he found that I only had a supply of morphine which in ordinary cases would serve quite well for occasional administration during a voyage, but in his case would only last a day, that he shot himself in his cabin.

I consider it an extremely unwise procedure for a victim either to decide himself or to be advised by others to take a sea-voyage and to leave behind the offending drug, for reasons which will be clear from the above case.

The quantity of morphine that can be taken by those who have for some time gradually increased the dose may be almost beyond belief. Ten grains would sound a very large amount to be taken each day to those who knew the pharmacopœial dose to be one-eighth to half a grain; but as much as forty, and even some observers have known sixty and seventy-five grains to be taken.

The question of regimen is of paramount importance. A dietary should be adopted which aims at great support and stimulation, but which at the same time is of such a character that the patient's damaged digestion will be capable of dealing with it. Food is of little value or help unless it can be comfortably assimilated. Each case must be viewed in all aspects, and full cognisance should be taken of family history and individual idiosyncrasy, personal life history, nature and degree of existing disease or disorder—all such matters must be carefully studied before a definite line of procedure is adopted, if complete, rapid, and permanent success is to be attained. Again, it should be remembered that even drugs chosen as the best substitutes may bear the same relationship to the original evil as the fire to the frying-pan, or as six to five, and that the cause of the sleeplessness should be sought for and mastered in any case.

Full details of treatment could not be got into

a book of such small dimensions as this: medicated baths have good effects in many cases; massage is necessary in others; psychotherapy will also be required, of such nature and degree as nervous or mental symptoms indicate, and it must be of a specially influential character in a class of case in which either the will-power is gone or perversions and obstinacies render the victim extremely difficult to deal with.

CHAPTER VIII

SOME SIMPLE INDUCEMENTS TO SLEEP

A HEALTHY person who has just amused himself quietly for sixteen hours, walking, reading, working a little, feeding moderately, will usually wish to lie down comfortably, having undressed in a room warm enough, there being also a warm bed to get into, the atmosphere being suitably ventilated ; such an one should soon go to sleep, under what should be considered most favourable conditions. Overwork, either mentally or physically, will result in his not being able to fall asleep so soon, because thoughts which have crowded his brain during the day will tend to remain, or activities which have fatigued him will have produced a disturbed over-exerted heart ; he must therefore wait until these untoward influences abate, or adopt some special means of dealing with them.

It follows that those who wish to sleep promptly and well on going to bed should cease hard work for an hour or more previous. Or they may go to bed and rest, letting their energies down gently by complete change of thought, perhaps reading light literature until a heaviness and drowsiness comes over the mind.

Some very hard workers, both mentally and

physically, are able to sleep well, in contradistinction to those who have disturbed nights after but a few hours' moderate exertion : all of which gives indication that in different people we are likely to observe different effects and results. Some can work twelve or sixteen hours a day and sleep well ; in such cases the physical and mental health is robust, digestion being perfect, and all organs working at their best.

The reader must grasp the truism that while so many things in this world appear alike they are really so very different. We identify things, orders, species, specimens, quite easily, because so many are alike. All classification depends upon likeness ; yet you shall not find two leaves of a tree exactly alike, nor will you be able to examine two hands, or marks of hands or thumbs or fingers, exactly alike : the deeper you dissect the further shall you fail. The impressions on palmar surfaces of hands may be as clear in their dissimilarity as will make your individual identification quite final and reliable, whether for one reason or another. Take two grains of corn ; they appear alike—exactly alike—to the ordinary eye. But now examine them with a lens and you shall find that the germinating points of each differ largely ; still more shall you prove dissimilarity if you wait until sprouting has taken place. How much twin children may be alike, at times ; yet the differences may be easily pointed out by those fairly observant. Two flowers will appear alike in colour, size, and appearance, but pull a petal away from one and place it by the side of another, and see the difference in shape and markings. Look straight

at a human face ; both cheeks appear exactly alike, as a rule : now look at the same face in a mirror, and in nine cases out of ten it will be seen that the two sides differ. We must take this great variability into account when studying disease and disorder in humanity, variability in constitution and extending to symptoms of disease, and in the effects of treatment.

The less mental energy the less physical fatigue is required as a counter-influence to ensure sleep ; and a person who is inactive mentally or physically during the day-time may sleep quite well at night. An individual who has merely walked to church after breakfast may sleep there, because the predisposing restful conditions for sleep may be ideal, there being little disposition to regard other members of the congregation, the person being fairly comfortably seated, while perhaps the service is also not in the least interesting or exciting to him. When there is literally nothing else to be done, therefore, a person will be predisposed to sleep.

We find the same relationship of cause and effect amongst animals. Fasten a dog up, and though it have slept all night it will sleep again a good deal of the next day, when there is nothing else to do. Again, when travelling in a railway train, or in a horse-drawn conveyance, and not actually driving, a person will sometimes fall asleep, chiefly because there is nothing else to do, and often extremely little to think about, especially when a gentle vibration also tends to soothe the traveller to slumber ; and let there be other travellers who are uninteresting, or it

may be objectionable, there is a concentration towards quiet self, with a rigid disposition to take no notice of anything beyond, that is very strongly conducive to sleep.

Other conditions being favourable, if you think of nothing you will sleep. But there is the difficulty—many will exclaim. Quite so; there may be so many influences and disturbances making you think and think again. It is surprising how one may keep thoughts away, however, determining to keep them out of the mind. A few moments' trial will show how restful even the attempt makes one. Let the experimenter test his will-power each night to see if thought can be set at naught. Again there will be the difficulty, for what will-power have people who are through and through unhealthy, with irritable circulation and a heart-beat that is all the time preventing? Still, every little will help; and those who are getting better and finding their will-power returning may take such interest in the management of themselves that even the idea of pains and distresses may be minimised in mind.

Next to thinking of nothing, thinking of one thing is even good. Simply counting, so often recommended and resorted to, operates by reducing a confused brain full of varied ideas down to exercising as little effort as possible; and as soon as the monotonous turns into the automatic, and the automatic wears itself out, there is nothing but sleep left to enter the situation. It is precisely the same with rocking or certain forms of vibration, which detain and limit the attention, bringing it down to a monotony

which itself passes into nothingness in mind, and therefore sleep.

It should be borne in mind that each state inducive to sleep helps and gently glides into the succeeding one ; let the man with busy brain take the first step by finding the conditions of physical comfort best conducive to sleep already referred to, then start thinking of as little as possible, keeping off fresh ideas, limiting himself down and down to a simple unworrying mood, having a peaceful frame of mind, encouraging a sense of single purpose—to rest, to sleep—keeping out everything else. If this one pleasant idea does not come, then counting may help. I have, however, no good opinion of counting. If a person can come down to counting he can do the rest—namely, fasten upon one single pleasant idea—dismissing every thought that is disagreeable, only holding to one that is quite pleasing, and letting the idea get thinner and thinner until it vanishes, merging into sleep.

“Easier said than done.” Yes, but worth mentioning and worth trying ; but, above all, helping the reader to better understand himself and the subject of sleep.

A very interesting article was once written for the *Daily Mail* by Sir William Laird Clowes on the subject of sleep and sleeplessness, in which he drew attention to the advantage of this single-minded concentration upon one pleasant simple thought. He referred to Boerhaave having once suggested “listening to the regular falling of drops of water into a resonant vessel.” This may even be more advantageous to some than counting :

it will cause less effort, and the very expectation and waiting for each drop impels just that amount of sleepy attention that draws the mind away from other matters and persuades it to inactivity. "Recalling the counties of Ireland" requires too much effort. This plan was once adopted by William O'Brien when in prison.

Sir William referred to Preyer's recommendation to his sleepless patients, to stand with an extended arm until the limb ached violently. He considered that this had a beneficial effect on account of the blood being drawn to the arm from other parts, including the brain. Apart from the disagreeableness of this procedure—one which I consider is as much likely to prevent peace and rest as to create it, notwithstanding any argument—it is more than hypothetical whether blood is drawn to the arm in sufficient quantity to deplete the brain. If this procedure were ever followed by beneficial results I would opine that the sufferer could not have arrived at anything very pleasant to concentrate his mind upon, or anything even merely monotonous: he must needs have had painful attention drawn in a particular direction to compel him to leave other thoughts aside; he merely gave himself another evil to choose from, which proved to him the lesser.

Sir William's observations were interesting in many respects, and instructive, but, he was, however, wrong when he asked us to believe that the eyeballs were rotated upwards during sleep; and, indeed, he contradicted himself in the same paragraph by proposing that this upward position of the eyes was "extraordinarily fatiguing." He came to

his conclusion by making too superficial observation, for he wrote: "This [position of the eyes] may be noted by anyone who takes the trouble quietly to lift the upper eyelid of a sleeper by pressing it lightly with a finger end." As a fact the eyes roll upwards when the lids are so separated because they turn from the light, and because they also turn reflexly away from what seems to them to be an offensive interference. They will do this even when awake. But they will not remain turned upwards when natural sleep has commenced.

Sir William was, however, correctly observing when he pointed out that fatigue resulted from voluntary attempt on the part of an experimenter to keep his eyes in an upward direction for a time. And he did well to note that this effect suggested that the eyes might be strained upwards by those who wished to induce sleep. Sir William found in his own case that sleep "invariably follows within a minute or so, except naturally upon occasions when acute pain or some other definite antagonistic factor interferes. The pain, however, must be severe to prevent the result."

But long before Sir William made his simple observations — extremely interesting, creditable, and useful notwithstanding, indicating not only great gifts, but a happy desire to advise suffering humanity to the best of his ability—those who had investigated sleep, and particularly the hypnotic state, had found out this tiring-of-the-eyes method. Braid, the distinguished Manchester practitioner, made mighty use of it, and demonstrated its value to medical scientists.

There can be no questioning the advantage of

this method of tiring the eyes as an inducement to sleep, and no doubt can remain as to its great efficacy over any of the other cruder means of limiting thought, such as concentrating the attention upon one simple subject, or by allowing monotonous sound or repeated effort to bring forgetfulness and rest, that have been above referred to. Let any reader just try for a second or two this turning of the eyes upwards, either with the lids closed or shut, and a sense of fatigue in eyes, eyelids, and brow will immediately bring with it a disposition to sigh, breathe deeper, and rest, while the very thinking alone of the upturned eye serves to limit attention down to one point, allowing previously disturbing thoughts and senses to pass by and be disregarded.

A mere closing of the eyes suggests sleep, in some slight degree, simply because it is one of the essential conditions permitting and accompanying and persuading sleep. Therefore a closing of them under fatigue will all the more suggest sleep, inasmuch as fatigue in any one part of the body will gently suggest fatigue elsewhere. Turned-up eyes, therefore, when sustained for a time, have the double effect of suggesting and even urging rest and sleep.

Closed eyes may of course be entirely defeated in their efforts if they merely enable a troubled brain to exercise itself: fatigue and ultimate closure induce rest by suggestion and deflection of the ideas to the one necessity for keeping the eyes in a certain position.

Sir William somewhat floundered again in his praiseworthy enthusiasm when he further hazarded

explanation thus: "It may be that the fatigue of the optical muscles favours the assumption on the part of the recalcitrant eyeball of that position which it should occupy during sleep, and so removes one cause of wakefulness"; but he was undoubtedly right when he further observed: "It may well be that the mental effort requisite for the maintenance of the eye in a fatiguing position is also conducive to the desired result."

Going further and revealing evidences of having had some acquaintance with the methods of the hypnotist, Sir William recommended his readers "to affix a small bright light two or three feet above the head," so that when looking at it the eyes would be turned upwards. For this purpose he devised an electric glow lamp covered with opaque black paper in which was cut a very small hole. "The brighter and smaller the point of light the better." He directed that the eyes themselves should be "bent upon the required spot." He found this method successful.

Dr. Edwin Ash invented what he named a hypnoscope, a black disc about the size of a hand mirror, in the middle of which was a concave mirror, very small. This he used to give his patients to look at until the eyes tired after the manner of Sir William Laird Clowes. But both these observers were merely attempting to advance the method of Braid before mentioned, who merely required his patients to look at any bright object—and he frequently used his metallic lancet case—held in front of, and preferably slightly above, the head, so that the eyes were compelled to strain upwards and grow tired. He found this re-

markably inducive to rest and to the hypnotic sleep.

Now any experimenter reading this book may prove for himself that Braid was so far right and Sir William Laird Clowes after him, as well as numerous scientific observers who have investigated in the same field of study. Let any object be held in the position referred to for a few moments, the experimenter reclining comfortably in a chair; a sense of rest will steal over the mind and body, and if all other influences are favourable sleep itself in not a few instances will take place. *This is really, purely, and simply auto-hypnotic suggestion, neither more nor less*, and working in as clear a sequence as it is possible to observe: the object suggests single attention to the gradual exclusion of all worrying or busy thoughts, provided the latter are not too excessive, at the same time that it tires a very sensitive portion of the anatomy; this tiring suggests weariness and rest to other parts of the body, including the brain—all making towards and finally ending in sleep.

Further, let the experimenter sit comfortably in an arm-chair and make a sustained effort to horizontally ridge-and-furrow the skin of the forehead. This is bound to create a tired feeling about the eyes and a sense of impending or actually appearing rest.

The hypnotic state, so-called hypnotic sleep, because it appears to be sleep, and really is a partial sleep, is thus a most favourable preparation suggesting the real natural sleep. And not infrequently those who are hypnotised for various purposes pass into a natural sleep, especially if it

be suggested by an operator that they should allow themselves to do so.

Realising the truth of Braid's conclusions and the very great value of his experiments, at the same time that Sir William Laird Clowes published his own opinions and experiences, I made a study myself of this auto-hypnotic rest to be obtained by fixing the visual and mental attention upon one spot, training and concentrating—or rather separating—the attention just upon one point away from and to the exclusion of all others absolutely ; and I sought to perfect the means by which it could be practised. I experimented upon some of the very worst cases that could be found in specialists' consulting-rooms—patients who could get no relief for their sleeplessness, excepting from drugs, and upon whom various hypnotic methods had been tried ; and I made what I found to be a considerable improvement upon any other appliance hitherto devised by psychic researchers, and having one great essential advantage that makes all the difference. The concave mirror made it difficult and impracticable to settle the vision. Unless the mirror could be manipulated by the operator in just one reflecting position it was of little use. Sir William Laird Clowes's electric light I found to be so far good, but too complicated, and necessitating too much trouble—indeed I found that the light was even too bright, and the whole arrangement far too great a nuisance to be practicable.

I found that the object to look at need only be bright enough for the eyes to easily rest themselves upon, and a reflecting ball was the very best

object of all : so long as any light at all were shining in the room, however small, this ball would give off quite sufficient reflection for all practical purposes ; it afforded just enough to look at comfortably. Now fix this reflector—less than an inch in diameter—upon a suitable holder ; and to help the vision to remain on the one spot I placed a circular disc at the back, then the appliance became a valuable one. As a patient lies comfortably in bed this appliance can be brought into position by its jointed holder, the ball and disc being fixed to just the right position. This appliance I have named a Monoscope. The silver ball reflects and is easily seen, *no matter how small the light in the room may be, and no matter what direction it may come from.* A night-light will afford ample reflection, or a very low turned-down gas jet. In the day-time the room curtains may be drawn close.

By means of this monoscope, which is made to fix on any pillow or cushion, a person may concentrate his vision upon one thing easier than in any other way, not straining the vision, but merely resting the eyes upon the ball on the disc, endeavouring at the same time to limit the thoughts down to simply peace, quietness, restfulness—to the exclusion of everything else. According to the interest taken, the will-power, and the perseverance, so may the resulting rest be determined. The monoscope will serve as a help in the training of self-discipline and self-command. It will help. But there is really nothing that can command and compel sleep, without drugs, so decidedly as the much more effectual influence to be further con-

sidered in the next chapter. When the insomnia is not of the worst type the monoscope is sure to be found of assistance, provided the sufferer can gather the frame of mind and disposition to help himself. There are those so bad, however, that they cannot help themselves, and do not wish to bother—too ill to consider themselves sufficiently to act in any way, too nervously disturbed to be able to energise—who really require professional guidance and help.

But a still more effectual appliance, in certain instances, is the result of my further recent researches, namely, the “Spectacle”-Monoscope. This consists of a long oval disc of aluminium, having a pair of arms like those of ordinary spectacles, which pass over the ears. Upon the disc are placed two spots, which when in comfortable position over the eyes appear as one. After looking at this spot for a few moments the sensation of tiredness of the eyes and desire for sleep is irresistible. A few seconds are sufficient to sleep some subjects.

These two monoscopes are amongst the most powerful aids to sleep known, the “spectacle” form standing alone as by far the most powerful and rapid means of inducing subliminal sleep in certain cases—whether used by a subject himself or by an operator—that has yet been discovered. Both kinds may be obtained through the leading surgical and optical instrument makers.

CHAPTER IX

THE SUBLIMINAL REST AS AN INDUCEMENT TO NATURAL SLEEP

THERE can be no questioning the great value of subliminal rest as a remedy of both direct and indirect power. I have already in a previous chapter referred to several facts and theories regarding hypnotism, and also explained to some extent the rationale of its efficaciousness. I would strongly recommend the reader to look over these again before reading this chapter. Hypnotic rest and influence is being increasingly recognised by our highest authorities as not only a legitimate form of treatment, but, in the hands of those competent and experienced enough to practise it, one which has proved itself to have in certain cases greater alleviative and curative effects than any other form of treatment that can be found—more particularly in all kinds of nervous affections.

The report received in 1892 by the British Medical Association from a special committee appointed by the Association “to investigate the nature of the phenomena of hypnotism, its value as a therapeutic agent, and the propriety of using it”—which report was unanimous—served to put the hall-mark of orthodoxy and scientific truth

upon a treatment that had indeed undergone some remarkable vicissitudes since the days when Braid of Manchester wrestled manfully with the distinction between mesmerism and hypnotism, and at least gave the medical profession some very wholesome food for future reflection. Yet the treatment has not reached the position which a mere medicinal one, or a surgical one, as favourably reported upon, would have established in a period of seventeen years—and why? Simply because during this period it has not been much better understood by the bulk of the profession than it was in 1892, when it was found necessary for a representative committee to hold the special enquiry referred to. A very few members of the profession have had the disposition to tackle the subject, for various reasons, while out of those who have done so a large percentage have given the thankless task up as a bad business, also for various reasons. All honour due to such as Tuckey, Moll, Bramwell, Woods, and others, who have had patience, perseverance, and the pluck to fight with what the Association's committee branded as a right thing, until further research and experiment should serve to confirm early theories and make more perfect methods of practice.

Let us note then that only a few have seen that there is something in hypnotism. There are reasons why the subject has been anathema to so many, and a thing to be rejected as uncanny and “best left alone” by still more. Let us examine some of these reasons.

MYSTERY

The nature of mesmerism and hypnotism, apparently involving the strange power of one asserting himself over another as some miracle-performer, wonder-worker, or possibly evil-distributor, frequently rendered it awe-striking and uncanny, if not alarming, to some. Thus there was a reluctance displayed against learning on the part of practitioners, and against being operated on by patients. Very little was known about hypnotism, and it was not a treatment that lent itself to further knowledge being obtained in any of the usual ways.

CHARLATANRY

Amongst those who had courage, and the desire to investigate and practise hypnotism, were a large percentage of charlatans. Hypnotism, like phrenology and palmistry, afforded just the kind of interest that helped the trickster to step over the boundary in order to make still further impression—by expanding the exposition of real phenomena or signs to serve irregular, sinister or profitable purposes. Hence the use of hypnotism for public entertainment, in which it rendered its subjects either astonishing, remarkable, amusing, or contemptible in their performances.

SCEPTICISM AND TIMIDITY

The public thus being but poorly or deceitfully instructed in first principles and effects, the scientific practitioner of medicine and surgery has

wisely thought twice before attempting to correct rooted prejudices that necessarily developed, even if he could ever have been induced to make any deep study of the subject himself. Nor was he introduced to the subject in a manner likely to lead him to investigation. Should he have seen phenomena himself, he would have been likely to ruminate: "Very strange—what is it? I cannot say. I have no opportunity of investigation." And there the matter would end. He might conclude: "Wonderful—something in it! Should like to find out more—must not—cannot!"

INTEREST AND DETERMINATION TO FIND OUT THE TRUTH

Again, the scientific practitioner may resolve, as a few have done: "Strange—remarkable—something in it! I will investigate—I am determined to investigate." The latter brain has been shown by such as Braid, Tuckey, Moll, Bramwell, Woods, who have investigated and only found a wonderful field for further investigation, having got a glimpse such as real scientists delight in and devoted workers find full of certainties, probabilities, possibilities, and even failures, all of which are so fascinating and so absorbing and satisfying to those having a right spirit. For, as in the case of games requiring great mental faculty or physical adroitness, with a treatment like hypnotism a researcher has never done—always much more to learn, more interesting realms to explore, more rewarding results and remarkable cures to attain.

IGNORANCE AND FEAR

Many who are afraid deem it wise to range themselves in opposition, for if the knowing learn more the ignorant will be left further behind. Again, once opposition has been shown it is often the wisest to continue, notwithstanding the inward sense being still open to conviction; many good men have started too vigorously in opposition and have found it difficult to alter original impressions, even when further investigations have revealed some truth. Others there are who might believe or who would believe but for fear of incurring hostile criticism. And it is, indeed, for some the safest to elbow in with the majority, and to run evenly and smoothly along lines of least resistance.

DIFFICULTY TO UNDERSTAND

The phenomena of hypnotism are indeed puzzling to most investigators. The whole literature well read will leave the enquirer with a good deal to learn which is as yet inexplicable. Phenomena have been contradictory, misleading, and disappointing. The practice has been beset with multifarious difficulties. Once the prejudices on the part of the public and medical men are broken down, however—and they are bound to be in time, as truth will surely shake to the top, however rudely the hazard casket be shaken—and given the increasing acquiescence and further clear conclusions that scientifically recorded truth and sincerity are certain to ultimately bring, it will, at some future time, be a matter of amazement that such ignorance was exhibited in the past.

That hypnotic influence now occupies a very important position as a therapeutic agent is shown by the increasing frequency with which consultants now send cases to specialists practising hypnotic or simple suggestive methods, and the list of physicians and surgeons of distinction who thus recognise the value of it is now a very large one. It is, moreover, quite evident that as surely as the present-day confidence in the genuineness and efficacy of it is begotten of the study of past efforts over many years, and of simple conviction after indisputable proof, so surely will this confidence grow and increase in the future.

As a direct means of inducing sleep hypnotic influence calms the nervous system, rendering a disposition that has been for long disposed to be irritable, and to worry, and to take trifling affairs too seriously, inclined to take rest comfortably and pleasantly, remaining sufficiently conscious all the time, but waking invariably feeling better; and what brings this most valuable means towering above all other hypnotics is this, that it produces absolutely no disadvantageous effects either in the immediate or distant future. I have never yet seen any disadvantage or any untoward effect follow the treatment of any condition whatsoever by hypnotic suggestion. Nothing but good comes of it. While as an indirect help it is equally pre-eminent, by rendering the patient restful and comfortable; *the nervous system being steadied and controlled, it enables the medical attendant to apply, and the patient to cheerfully and happily receive, any other treatment that may be directed towards restoring the general condition.* I have had patients

who were so advanced in neurotic and physical disorder that particular treatments—and even simpler ones—could not be applied, the patient not being in a fit condition either to understand or to carry out instructions; indeed, there are cases in which the patient arrives at such hopeless and black despair that they abandon all ideas of getting well, and decline to seek any further aid from anyone whatsoever. In such cases hypnotic influence prepares the patient to contentedly carry out what is best for their case; it restores powers of self-examination and study.

The hypnotic rest is the very best preliminary to natural sleep, the one passing into the other—the one permitting the other when otherwise impossible. As we have seen that sleeplessness is usually a symptom—that it depends upon various disorders which themselves require treatment—it will be understood that in psychical hypnotic influence we have therefore both a direct and an indirect treatment of immense potency, curing the symptom sleeplessness, but also to a very great extent aiding in the treatment of disorder or disease—which may be, as has been pointed out, so severe and so advanced and complicated that no other mechanical, medicinal, or even superhuman method would avail. Cases have proved this times without number.

I have had patients who could obtain no sleep excepting under large and dangerous doses of drugs, but who have readily found rest under hypnotic influence. By means of the latter the brain is brought back to calmness, nerve tension is relaxed, and the power of sleep is restored, the

patient realising that the sleeping powers are returning, and therefore feeling restful and better throughout in consequence, soon being able to fall asleep by their own sense of merely needing and desiring it.

Hypnotism as a treatment is valuable in all nervous conditions and in most mental disorders, especially in the borderland or early stages. And inasmuch as so many other disorders and diseases are powerfully influenced by the nervous system, either for good or evil, the reader will understand what a large field is open to this form of nerve restorer. Even cases of acute inflammation, in which a high temperature has been kept up by nervousness, have been rapidly cured by hypnotism.

It is true that in certain cases of insomnia, due to either minor initial or to more serious ulterior causations, the condition may be very successfully and rapidly treated without hypnotic influence being at all necessary, provided the causation, single or compound, be accurately discriminated and wisely and scientifically combated; but in the more complicated and intricate cases—neurotic or approaching mental, and involving a considerable amount of physical deterioration or disease—the verdict of such men of advanced scientific thought as Professor Osler, Dr. David Ferrier, Sir Hugh Beevor, Dr. Risien Russell, Dr. Lloyd Tuckey, Dr. J. F. Woods, Dr. Milne Bramwell, Dr. Moll, and many other distinguished men who have studied hypnotic influence seriously and deeply—some of whom have written large works on the subject—has long ago been

given, and has now been quite often enough repeated, that in hypnotic influence we possess a power that can effect cure at times and in instances when every other means has failed. Probably the most influential and incontrovertible pronouncement upon what has been for so long a time a much-questioned and mysterious means of alleviating human suffering is that recently made to the world of scientific thought by Professor Osler, Regius Professor of Medicine of the University of Oxford, who, in a recent address delivered before the Ontario Medical Association, advised that "much more attention should be paid to the important subject of psychotherapy."

CHAPTER X

A PLAIN TALK TO SUFFERERS

THUS have been explained to you two great classes of treatment of insomnia, the one being directed towards conditions, disorders, or diseases of which restlessness has been a symptom, the other acting directly upon the brain and nervous system by relaxing abnormal tension. Either is powerful and important alone, while it follows that an exercise of both in certain cases will be of corresponding value. The reader will hardly need the direction that either the former itself or a combination with the latter will be the more permanently curative.

Whatever disorder or disease you may suffer from will appear to you in the form of signs or symptoms. You will perhaps not understand them—only a scientifically trained and practised medical man can discriminate and differentiate between them at all accurately. Should you have pain, then understand there is no such thing as pain without a cause, and the pain itself is probably an indication of a disorder which is hidden. No remedy can be applied safely and with any possibility of perfect adaptability that is not selected under correct judgment as to the cause of the particular symptoms that are suffered from or the

signs that are seen. Quackery must of necessity work in the dark, remedies being applied broadcast, some to fall in the right place and to advantage, others to produce untoward effect, all with haphazard, reckless, and ignorant incertitude.

Chronic sleeplessness is practically always a symptom indicating that something else behind it is the real offender. What is the use of rubbing a painful joint with embrocation when the blood of the whole body is at fault, producing rheumatism? Commonly, repeatedly, everlastingly does the doctor find amongst his patients those who have been rubbing a painful gland, with the idea that it may be "rubbed away," when they are only implanting further trouble into it and provoking it to further inflammation, inviting suppuration—the cause being deeper, perhaps indicating a dangerous condition of the whole system. *Initial cause should always be the first quest of the true scientist.*

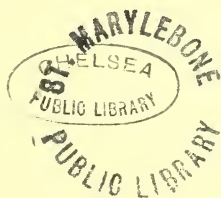
Do not be satisfied with a remedy for the time being, for you may shorten your future by a "penny-wise and pound-foolish" policy. Your remedy for the moment may not only have effects for the day of the evil thereof, but be actually making its own particular mischief to be going on with, accumulating a store of misery for later days.

If you are sleeping badly there is bound to be some other disorder somewhere, either as affecting your brain—it may be worry or something more serious—or your nerves, your internal organs, or your circulation. Get your disorder or disease put right, in the right way, and you will recover

your power of sleeping. Put yourself in the hands of a scientific medical adviser. Do not go to him for a sleeping-draught, but *ask him what is the cause of your sleeplessness*, and let him realise from what you say that you have got some really sensible interest in yourself ; he will then take all the greater pleasure in what he does for you.

If you want to get the most out of life think first of yourself—and find the true light—not altogether selfishly, but only *so far as you shall fit yourself to enjoy associating with and helping others*.

WHENEVER IN DESPAIR ALWAYS BEAR THIS IN MIND, THAT THERE MAY BE OTHER CASES STILL MORE DISTRESSING THAN YOURS, AND THAT THERE ARE VERY FEW PAINFUL CONDITIONS BUT WHAT MIGHT BE WORSE : THEREFORE HAVE COURAGE AND HOPE, AND YOU WILL GET WELL UNDER WISE GUIDANCE.



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